TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, [redacted] 1921

No. [redacted]51

HERBERT L. HILDRETH, PETITIONER,

vs.

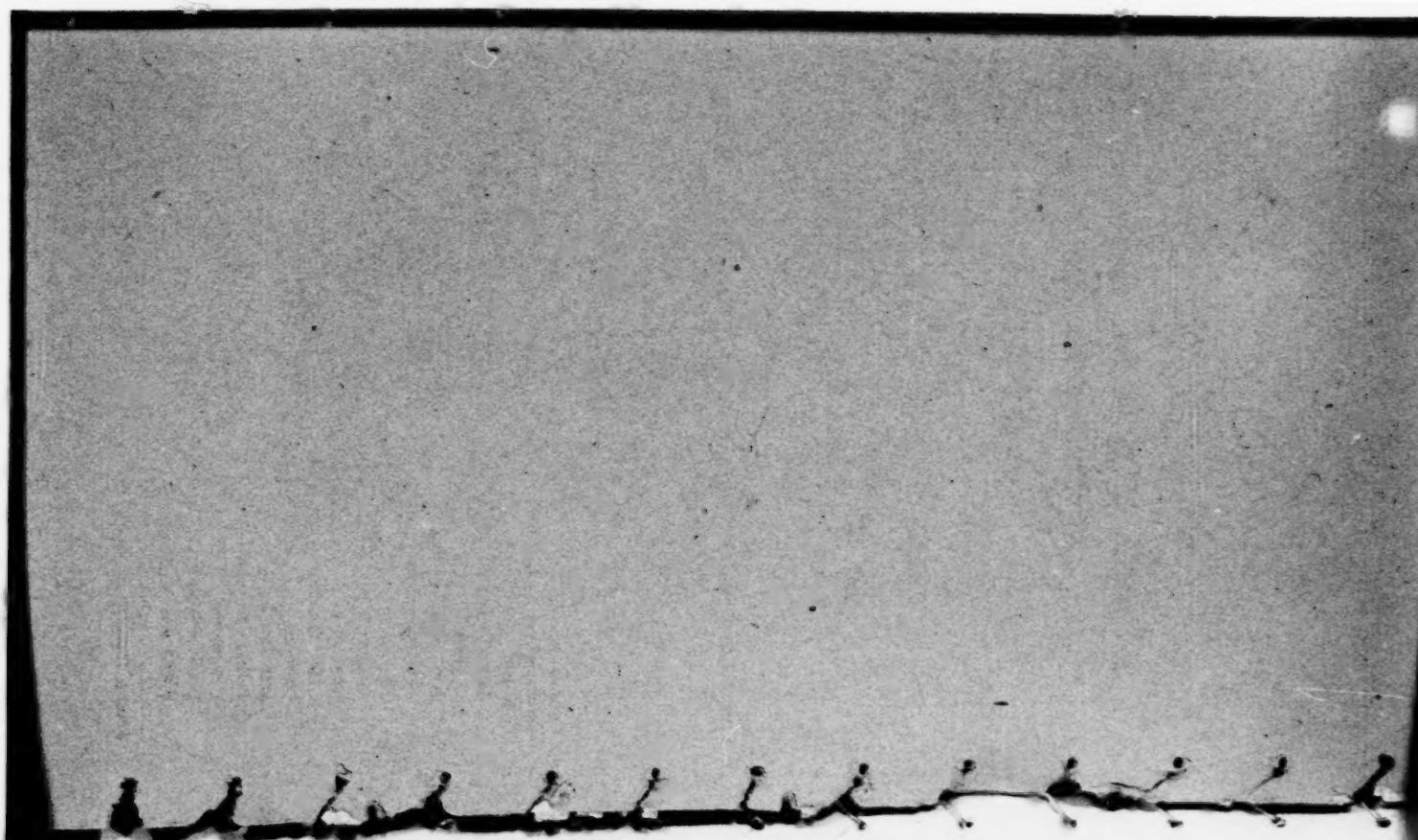
JIM M. MASTORAS.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE NINTH CIRCUIT.

PETITION FOR CERTIORARI FILED MAY 10, 1922.

CERTIORARI AND RETURN FILED NOVEMBER 13, 1922.

(27,676)



(27,676)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1920.

No. 333.

HERBERT L. HILDRETH, PETITIONER,

vs.

JIM M. MASTORAS.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE NINTH CIRCUIT.

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No. 3341

United States

Circuit Court of Appeals

For the Ninth Circuit.

JIM M. MASTORAS,

Appellant,

vs.

HERBERT L. HILDRETH,

Appellee.

Transcript of Record.

Upon Appeal from the United States District Court for the District of Oregon.

Names and Addresses of Attorneys of Record.

Mr. JOSEPH L. ATKINS, Chamber of Commerce Building, Portland, Oregon; Mr. W. A. ROBBINS, Wells Fargo Building, Portland, Oregon; Mr. DAVID E. LOFGREN, Pittock Block, Portland, Oregon,

For the Appellant.

Mr. CHESTER G. MURPHY, Fenton Building, Portland, Oregon, and Mr. GEORGE P. DIKE, and MacLEOD, CALVER, COPELAND & DIKE, 350 Fremont Building, Boston, Massachusetts,

For the Appellee.

In the District Court for the United States for the District of Oregon.

IN EQUITY—No. 7466.

HERBERT L. HILDRETH,

Complainant,

vs.

JIM M. MASTORAS,

Defendant.

Citation on Appeal.

United States of America,
District of Oregon,—ss.

To Herbert L. Hildreth, GREETING:

WHEREAS, Jim M. Mastoras, the above-named defendant, has lately appealed to the United States Circuit Court of Appeals for the Ninth Circuit from a decree rendered in the District Court of the United States for the District of Oregon, in your favor, and has given the security required by law;

YOU ARE therefore, hereby, cited and admonished to be and appear before said United States Circuit Court of

Appeals for the Ninth Circuit, at San Francisco, California, within thirty days from the date hereof, to show cause, if any there be, why the said decree should not be corrected, and speedy justice should not be done to the parties in that behalf.

GIVEN under my hand, at Portland, Oregon, in said District, this 29th day of October, in the year of our Lord one thousand nine hundred and eighteen.

CHAS E. WOLVERTON,
Judge.

Service accepted Oct. 30th, 1918.

CHESTER G. MURPHY.
By JAS. L. CONLY.

[Endorsed]: No. 7466. 19—233. United States District Court, District of Oregon. Herbert L. Hildreth, Complainant, vs. Jim M. Mastoras, Defendant. Citation on Appeal. U. S. District Court, District of Oregon. Filed Oct. 30, 1918. By G. H. Marsh, Clerk. [1*]

In the District Court of the United States for the District of Oregon.

March Term, 1917.

BE IT REMEMBERED, that on the 2d day of June, 1917, there was duly filed in the District Court of the United States for the District of Oregon a bill of complaint, in words and figures as follows, to wit: [2]

In the District Court of the United States for the District of Oregon.

IN EQUITY.

HERBERT L. HILDRETH
vs.
JIM M. MASTORAS.

*Page-number appearing at foot of page of original certified Transcript of Record.

Bill of Complaint.

To the Honorable the Judges of the District Court of the United States in and for the District of Oregon.

Herbert L. Hildreth, a resident of Boston, in the county of Suffolk, and Commonwealth and District of Massachusetts, a citizen of said Commonwealth and of the United States of America, brings this his bill of complaint against Jim M. Mastoras, of Portland, county of Multnomah, State of Oregon, having a regular and established place of business at said Portland.

And thereupon your orator complains and says:

1. This is a suit in equity arising under the patent laws of the United States. The defendant has a regular and established place of business within said District of Oregon and has committed the infringement complained of within said District of Oregon, and upon these facts the Court's jurisdiction depends.

2. That on and before the fifth day of November, 1901, Herbert M. Dickinson, then of Grand Rapids, in the county of Kent, and State of Michigan, was the true, original, and first inventor of certain new and useful improvements in candy-pulling machines, not known or used by others in this [3] country before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country before his invention or discovery thereof, or more than two years prior to his application for the patent hereinafter mentioned, nor patented to himself or to others on an application for a patent filed in any country by himself or his legal representatives prior to his said application in the United States, and not in public use or on sale in this country for more than two years prior to his said application and which he has never abandoned to the public.

3. And your orator further shows unto your Honors that said Herbert M. Dickinson, having made due application therefor, and having duly complied in all and every respect with the statutes in such cases made and provided, letters patent of the United States No. 831,501, for said invention, were on the 18th day of September, 1906, issued and delivered in due form of law to said Herbert L. Hildreth, as assignee by mesne assignments of said Herbert M. Dickinson, whereby the plaintiff became and now is the exclusive owner of all the right, title, and interest in and to the invention covered by the said letters patent and in and to the said letters patent, as in and by said letters patent and by said assignments, or duly certified copies thereof, ready here in court to be produced and of which profert is hereby made willfully and at large appear.

4. That the defendant herein Jim M. Mastoras has since the first day of February, 1911, infringed upon the rights of the plaintiff by making, using, and selling within the District of Oregon, candy-pulling machines embodying the invention of letters patent No. 831,501; that said infringement by the said defendant has been willful and deliberate and that [4] the defendant will continue to infringe upon the rights of the plaintiff in said letters patent unless prevented by a decree of this court.

5. And the plaintiff further shows unto your Honors that he has manufactured and leased to others to be used, large numbers of machines containing the invention set forth in said letters patent which he has marked "patented" together with the day and year on which said letters patent were issued in accordance with the statute in such case made and provided.

6. That the defendant has been duly notified of his infringement of said letters patent, but nevertheless has continued to infringe same since said notice, and that the

defendant has profited and the plaintiff has been damaged by said infringement.

7. That the plaintiff is informed and believes and therefore avers that the said defendant threatens to continue said infringement and unless he is restrained from so doing the plaintiff will suffer great and irreparable damage from said unlawful acts of said defendant, and said defendant has derived and received, and is still deriving and receiving, from said infringing acts great gains and profits.

Wherefore the plaintiff prays that the defendant may be decreed to account for and pay over the profits thus unlawfully derived from the violation of the rights of the plaintiff as aforesaid; and that your Honors upon entering a decree in favor of the plaintiff against the said defendant for infringement as above prayed for, may also assess or cause to be assessed under your direction as well the profits or income derived from the said infringement, as also in addition thereto the damages sustained by your orator by reason of the said infringement, and that your Honors may increase the actual damages so [5] assessed to a sum equal to three times the amount of the assessment, in accordance with the statute in such cases made and provided under the circumstances of this wilful and unjust infringement committed by the said defendant as hereinbefore set forth; and further that the said defendant may be restrained from all further violation of the rights of your orator as aforesaid; the plaintiff prays that your Honors may grant a writ of injunction issuing from and under the seal of this Honorable Court, perpetually enjoining and restraining the said defendant, his clerks, officers, attorneys, agents, and workmen, from any further making, using or selling in any manner of any device embodying the patented improvement, or any part thereof, the exclusive use and benefit of which is secured to the plaintiff by the said letters pat-

ent, and also that the defendant may be decreed to pay the costs of this suit, and the plaintiff prays for such other and further relief as the equity of the case may require and as to your Honors may seem meet.

And may it please your Honors to grant unto the plaintiff a provisional or preliminary injunction issuing from and under the seal of this Honorable Court, enjoining and restraning the defendant, to the same purport, tenor and effect as hereinbefore prayed for in regard to a permanent injunction.

HERBERT L. HILDRETH.

CHESTER G. MURPHY,
Of Attys. for Pltff.
GEORGE P. DIKE,
MacLEOD, CALVER, COPELAND & DIKE,
350 Tremont Bldg., Boston Mass. [6]

United States of America,
District of Massachusetts,
County of Suffolk,—ss.

Boston, May 22, 1917.

Before me personally appeared the above-named Herbert L. Hildreth, who being duly sworn, says that he is the Herbert L. Hildreth, the plaintiff named in the foregoing bill of complaint, that the facts hereinabove averred are true, except as the same are averred upon information and belief, and as to those matters he believes it to be true.

[Seal] ALICE H. MORRISON,
Special Commissioner.

Filed June 2, 1917. G. H. Marsh, Clerk. [7]

AND AFTERWARDS, to wit, on Monday, the 2d day of July, 1917, the same being the first judicial day of the regular July, 1917, term of said Court—Present, the Honorable CHARLES E. WOLVERTON, United States District Judge presiding—the following proceedings were had in said cause, to wit: [8]

In the District Court of the United States for the District of Oregon.

IN EQUITY—No. 7466.

HERBERT L. HILDRETH,

Complainant,

vs.

JIM M. MASTORAS,

Defendant.

Order to Amend Complaint by Interlineation.

This matter coming on for hearing upon motion of the defendant requiring complainant to make more definite and certain the bill of complaint filed herein, by setting forth and specifying the claim or claims under which the alleged infringement arises, Mr. W. R. Litzenberg appearing in behalf of the motion for defendant, and Chester G. Murphy appearing for the complainant, and it appearing that complainant has elected to stand on claim I of his letters patent No. 831, 501:

IT IS NOW THEREFORE ORDERED that complainant may by interlineation amend his complaint accordingly, and that line five of paragraph 4 (page 3) of the bill, now reading "the invention of letters patent No. 831,501; that the said in—" may be by interlineation amended to read "the invention of letters patent No. 831,501, *and particularly in claim 1 thereof;* that the said in—"

CHAS. E. WOLVERTON,
District Judge.

Dated at Portland, Oregon, July 2, 1917.
Filed July 2, 1917. G. H. Marsh, Clerk. [9]

AND AFTERWARDS, to wit, on the 19th day of July, 1917, there was duly filed in said court an answer, in words and figures as follows, to wit: [10]

In the District Court of the United States for the District of Oregon.

IN EQUITY.

HERBERT L. HILDRETH
vs.
JIM M. MASTORAS.

Answer.

To the Honorable Judges of the District Court of the United States in and for the District of Oregon:

Comes now Jim M. Mastoras, the above-named defendant, and answering the bill of complaint herein, admits, denies and alleges as follows, to wit:

I.

Said defendant admits that this is a suit in equity arising under the patent laws of the United States; that he has a regular and established place of business within said district of Oregon, but denies that he has committed the infringement complained of within the district of Oregon, or any infringement whatsoever.

II.

This defendant denies that on or before the 5th day of November, 1901, or at any time, Herbert M. Dickinson was the true, original and first inventor of certain new and useful improvements in candy-pulling machines, or of any improvements therein, not known or used by others in this country before his alleged invention or discovery thereof, or of any improvements therein, not pat-

ented or described in any printed publication in this or any foreign country before his alleged invention or discovery thereof, or more than two years prior to his application for patent therefor, or of any improvement [11] in candy-pulling machines not in public use or on sale in this country for more than two years prior to his application for patent therefor.

III.

This defendant admits that the said Herbert M. Dickinson did make application for a patent on the alleged invention, and that letters patent of the United States number 831,501 was issued on the 18th day of September, 1906, to Herbert L. Hildreth, as assignee of said Herbert M. Dickinson, but this defendant denies that said Herbert L. Hildreth, by the issuance of said letters patent, secured any right, title, or interest in and to any invention as alleged.

IV.

This defendant denies that since the first day of February, 1911, or at any time, he has infringed upon any rights of said plaintiff by making, using and selling within the district of Oregon, or elsewhere, candy-pulling machines embodying the alleged invention of letters patent number 831,501, and particularly claim number 1 thereof, or any claims thereof, and this defendant denies that he will infringe upon any rights of said plaintiff in said letters patent unless prevented by a decree of this court.

V.

This defendant denies that plaintiff has manufactured and leased to others to be used large numbers, or any number, of machines containing the alleged invention set forth in said letters patent which he has marked "patented" together with the day and year on which said letters patent were issued in accordance with the statute in such case made and provided. [12]

VI.

This defendant denies that he has been duly notified of said alleged infringement of said letters patent, and denies that he has continued to infringe the same since said alleged notice, and denies that he has profited and that the plaintiff has been damaged by said alleged infringement.

VII.

This defendant denies that he threatens, or ever did threaten, to continue said alleged infringement, or any infringement, and denies that unless he is restrained from so doing said plaintiff will suffer great and irreparable damage, or any damage, from any unlawful acts of this defendant, and denies that he has derived and received, or is deriving or receiving, from said alleged infringing acts great gains and profits, or any gains and profits whatsoever.

This defendant further answering plaintiff's bill of complaint alleges:

That said letters patent number 831,501 is invalid and of no force or effect, the alleged improvements described and claimed in said letters patent having been patented and described in certain printed publications long prior to the date of the alleged invention and discovery thereof by said Herbert M. Dickinson; that said alleged inventions and improvements were well known and were illustrated, described and disclosed in various publications and letters patent in Great Britain and the United States prior to his, the said Herbert M. Dickinson's alleged invention or discovery thereof, to wit:

British patent number No. 10,424, issued May 6, 1902, to Edward W. Barratt of Woodgreen, England.

United States patent number 496,925, issued May 9, [13] 1893, to John H. Watson of Worcester, Massachusetts.

United States patent No. 511,011, issued December 19, 1893, to P. J. G. Firchau of West Plains, Missouri.

Also any other patents and printed publications, or titles, dates and places of publication which are at present unknown to this defendant, and for all of which he is causing diligent search to be made and which, when known, he prays leave to insert and set forth in this answer.

Defendant further answering plaintiff's bill of complaint alleges that heretofore, and on or before the 9th day of October, 1916, Gotthold L. Langer, of Portland, Multnomah county, Oregon, was the true, original and first inventor of certain new and useful improvements in candy-pulling machines, not known or used by others in this country before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country before his invention or discovery thereof, or more than two years prior to his application for the patent hereinafter referred to, and not in public use or on sale in this country for more than two years prior to his said application for patent therefor, and that no application for a foreign patent for said invention was filed by him or his legal representatives more than twelve months prior to his said application.

And this defendant further shows unto your Honors, that upon written application duly made and filed by said Gotthold L. Langer in the United States Patent Office, and the payment of the fees required by law, under date of July 10, 1917, letters patent number 1,232,697, in the name of the United States of America, signed and sealed by the Commissioner of Patents, were duly and lawfully issued on said application, recorded and delivered to this defendant, as assignee of the [14] said Gotthold L. Langer, as appears of record from said letters patent, and the same are now in his possession and ready to be produced when required, securing to this defendant and to his assigns for the full term of seventeen years from the date thereof, the full and exclusive right for making, using and selling the invention and

improvements described therein; that this defendant has made but one candy-pulling machine, and it was made according to the specifications as set forth and referred to in his said letters patent; that the same is not an infringement upon or against any patent whatsoever, and particularly upon or against any rights that may be claimed by complainant; that this defendant has acted in the utmost good faith; that his said letters patent were lawfully granted on a showing that the said inventor was the sole and first inventor of the new and useful improvements in candy-pulling machines as described and claimed in his said letters patent.

Wherefore without admitting that any other matter contained in said bill of complaint material to be answered and not already confessed, voided or denied, is true to the knowledge or belief of this defendant, the defendant submits that the plaintiff is not entitled to any relief whatsoever against this defendant, all of which matters and things this defendant is ready to aver and maintain and prove, and prays to be hence dismissed with his reasonable costs and disbursements in this behalf most unjustly sustained.

Dated at Portland, Oregon, this 19th day of July, 1917.

JIM M. MASTORAS.

W. R. LITZENBERG,
Attorney for Defendant. [15]

State of Oregon,
County of Multnomah,—ss.

Be it known that on this 19th day of July, 1917, before me, a notary public in and for said county and State, personally appeared the above-named Jim M. Mastoras, being by me duly sworn, and acknowledged that he is the defendant named in the foregoing answer, that the facts therein set forth are true, of his own knowledge, except as to matters stated upon information and belief,

and as to these matters he believes them to be true.

[Seal] I. M. GRIFFITH,
Notary Public for Oregon.

My commission expires March 3, 1921.

Due service, by receipt of a copy of the foregoing answer, is hereby accepted in Multnomah County, Oregon, this 19th day of July, 1917.

CHESTER G. MURPHY,
Attorney for Complainant.
By F. G. DOWLING.

Filed July 19, 1917. G. H. Marsh, Clerk. [16]

AND AFTERWARDS, to wit, on the 12th day of January, 1918, there was duly filed in said court a motion for continuance, with affidavits attached thereto, in words and figures as follows, to wit: [17]

In the District Court of the United States for the District of Oregon.

HERBERT L. HILDRETH,
Plaintiff,

vs.

JIM M. MASTORAS,
Defendant.

Motion for Continuance.

Comes now the defendant, Jim M. Mastoras, appearing by and through his attorneys, and moves the Court for an order continuing the time of the trial of the above-entitled case to some date subsequent to January 23, 1918, upon the grounds and for the reason that he has been unable to procure material evidence to present at the trial, and that said defendant cannot safely or at all go to trial and properly present his defense without said evidence, and that he has used due diligence to procure

same as is more fully shown by the affidavit of W. A. Robbins, one of his attorneys, the affidavit being hereto attached and made a part hereof.

This motion is not filed merely for the purpose of delay, but in the opinion of counsel is necessary to prevent a miscarriage of justice as is more fully shown in the affidavit of W. A. Robbins, hereto attached and made a part hereof.

A. W. LAFFERTY.
D. E. LOFGREN.
J. L. ATKINS.
W. A. ROBBINS. [18]

In the District Court of the United States for the District of Oregon.

HERBERT L. HILDRETH,
Plaintiff,

vs.

JIM M. MASTORAS,
Defendant.

Affidavit of W. A. Robbins.

District of Oregon,—ss.

I, W. A. Robbins, being first duly sworn, depose and say: That I am an attorney at law, residing at Portland, Oregon; that during the month of May, 1917, plaintiff filed a bill of complaint against said defendant in this court and cause, and thereafter and on or about the 9th day of July, 1917, said defendant Jim M. Mastoras appeared by and through his attorney W. R. Litzenberg and then and there filed an answer. Thereupon the case was placed at issue. Thereafter said W. R. Litzenberg removed to Los Angeles, California, and subsequently said case was placed on the trial docket for Wednesday, January 23, 1918. Said defendant Jim Mastoras expected to have said W. R. Litzenberg try said case, but

after said Litzenberg removed to California defendant was unable to secure his attendance at the trial, thereby making it necessary for defendant to secure other attorneys to try said case. Affiant as well as co-counsel D. E. Lofgren and J. L. Atkins were called into said case between Monday, January 7, and Thursday, January 10, 1918, and immediately co-operated with co-counsel A. W. Lafferty in preparing said case for trial. After examining the pleadings and records of the case. it was discovered that [19] it was absolutely necessary, in order to properly or at all defend said case, to secure from the Commissioner of Patents at Washington, D. C., a certified copy of the record made by the examiner of patents in patent No. 496,925, issued to J. H. Watson, May 9, 1893, and patent No. 511,011, issued to P. J. G. Firchau, December 19, 1893, patent No. 832,834, issued October 2, 1906, to Hildreth, patent 857,770, issued July 25, 1907, to Thibodeau, patent No. 831,501, issued September 16, 1906, to Dickinson, patent No. 1,232,697, issued July 10, 1917, to Langer, and patent No. 496,925, issued May 9, 1897, to Watson.

It was also discovered that it was necessary for the defendant to have certified copies of all of said patents, together with a certified copy of the record showing the examination of the examiner of patents, in order to submit same to defendant's expert witnesses so that they could determine whether or not, as a matter of fact, U. S. Patent No. 831,501, issued September 18, 1906, to Herbert L. Hildreth as assignee is an infringement on patent No. 1,232,697, issued February 1, 1911, to defendant Jim M. Mastoras as assignee. That unless or until the defendant receives said certified copies of said patents and records it will be impossible for him to prepare for trial.

That defendant has used due diligence in securing said documentary evidence and said expert testimony, in that defendant as well as cocounsel A. W. Lafferty were informed and believed that defendant's first counsel W. R.

Litzenberg had already secured said documentary evidence and testimony and would forward same to defendant's Portland counsel, but evidently there was a misunderstanding in this regard, and said prior counsel for defendant, W. E. Litzenberg, failed to secure said documentary evidence from the patent office; that as soon as present counsel for defendant Jim M. Mastoras discovered that said documentary evidence had not been procured [20] on behalf of defendant, they immediately caused a telegram to be sent to the Commissioner of Patents at Washington, D. C., under date of Wednesday, January 9, 1918, requesting that said documentary evidence be immediately prepared and sent to Portland, Oregon, but affiant is now informed, and therefore alleges the fact to be, that it will be impossible for the Commissioner of Patents at Washington, D. C., to prepare said documentary evidence and mail it to defendant's counsel at Portland, Oregon, and thereafter have same examined by defendant's expert witnesses prior to January 23, 1918.

By reason of the foregoing defendant cannot properly or at all present his defense on January 23, 1918, and therefore has filed a motion in this court and cause asking that said case be continued for at least an additional thirty days, in order that he may secure said documentary evidence from Washington, D. C., and have same examined by competent experts who will thereby be ultimately qualified to testify at said trial.

Dated at Portland, Oregon, this 11th day of January, 1918.

W. A. ROBBINS,
Of Attorneys for Defendant.

Subscribed and sworn to before me this 11th day of January, 1918.

[Seal]

H. W. BERG,
Notary Public for Oregon.

My commission expires 6/2/19.
Service by copy admitted at Portland 1/12, 1918.

C. G. MURPHY,
Of Solicitors for Pltff.

Filed January 12, 1918. G. H. Marsh, Clerk. [21]

AND AFTERWARDS, to wit, on Monday, the 14th day of January, 1918, the same being the 60th judicial day of the regular November, 1917, term of said court —Present, the Honorable ROBERT S. BEAN, United States District Judge, presiding—the following proceedings were had in said cause, to wit: [22]

In the District Court of the United States for the District of Oregon.

No. 7466.

January 14, 1918.

HERBERT L. HILDRETH
vs.
JIM M. MASTORAS.

Order Denying Motion for Continuance.

Now, at this day, this cause comes on to be heard upon the motion of the defendant and the affidavit of Mr. W. A. Robbins attached thereto, to cancel the date heretofore set for the trial of this cause, and for a continuance, and was argued by Mr. Chester G. Murphy, of counsel for said plaintiff, and by Mr. W. A. Robbins, of counsel for said defendant. Upon consideration whereof, IT IS ORDERED that said motion be and the same is hereby denied. [23]

AND AFTERWARDS, to wit, on the 29th day of July, 1918, there was duly filed in said court an opinion of the Court, in words and figures as follows, to wit: [24]

In the District Court of the United States for the District of Oregon.

No. 7466.

July 29, 1918.

HERBERT L. HILDRETH,

Complainant,

vs.

JIM M. MASTORAS,

Defendant.

Opinion.

MacLEOD, CALVER, COPELAND and DIKE and CHESTER G. MURPHY, for Complainant,

A. W. LAFFERTY, D. E. LOFGREN, J. L. ATKINS and W. A. ROBBINS, for Defendant.

WOLVERTON, District Judge:

This is a suit for injunction to restrain an alleged infringement by defendant of complainant's patent.

Complainant is the owner of what is known as the Herbert M. Dickinson patent, letters patent for which were issued to him, being numbered 831,501. The device is for pulling candy. Claim 1, which it is claimed is being infringed, is as follows:

> "A candy-pulling machine comprising a plurality of oppositely-disposed candy hooks or supports, a candy-puller, and means for producing a specified relative in-and-out motion of these parts for the purpose set forth."

The hooks consist of a perpendicular standard or pin affixed to the bottom of a trough and in the center thereof, and two other pins or standards suspended from [25] an arm or plate, which in turn is affixed to a support and made to rotate nearly a one-half revolution. By suitable contrivance the support which carries the pins is made to move back and forth from end to end of the trough, and at each end of the trough the pins are made, by the rotary motion of the plate to which they are suspended, to reverse their positions from one side of the trough to the other before beginning their movement in the opposite direction. In this way there is produced an in-and-out movement of the suspended pins relative to the stationary pin every time they reach and depart from the ends of the trough. This movement causes the hank of candy which is placed in the trough to be pulled by laping on itself as the suspended pins pass and repass the fixed pin and as their positions are reversed. The operation of the device pulls the candy, or at least that is the theory advanced by the complainant.

Defendant is the assignee of the Langor patent, No. 1,232,697, and his device, which it is alleged infringes claim 1 of the complainant's patent, consists simply of two stationary pins, each extending horizontally from the center of a disk, and a third pin, which is made to rotate about the disks in opposite directions, so as to pass and repass between the stationary pins at each revolution. The candy is placed on the pins in operation, and is lapped and relapped as the rotating pin passes and repasses between the stationary pins. When the candy is in proper elasticity, it needs no support aside from that accorded by the pins. [26]

Preliminarily to entering upon the more salient features of the present inquiry, I will dispose of a suggestion of counsel for the defendant to the effect that the Patent

Office, in an interference proceeding had involving the Dickinson patent with others, has rendered claim 1 of the patent subject to a narrow rather than a broad construction.

Originally Dickinson made but three claims, of which what is now claim 1 was the third, and the suggestion is based upon the fact that at one stage in the proceeding claims 1 and 2 were rejected by the examiner. However, further action was taken respecting the rejected claims, a matter which counsel seems to have overlooked, whereby claim 1 was eventually allowed in exactly the same language as first written. It now constitutes claim 10 in the patent. Claim 2 was also allowed, with an amendment to avoid a supposed conflict with Firchau, making it read "a series of more than two pins or pulling members" instead of "a series of pins or pulling members." As amended, it is now claim 11. The Firchau concept was not in its operation a machine for pulling candy at all, but one for working or mixing candy. The contrivance consists of a drum with two pins or fingers extending therein, which are rotated in opposite directions, and has none of the elements of the Dickinson machine.

This disposes of any inference of narrow construction that might otherwise have been drawn from the fact of the examiner first rejecting claims 1 and 2 as first propounded by Dickinson, and also of any contention that the Firchau patent anticipates the Dickinson device. These matters of conflict were settled in the Patent Office in the interference proceeding, and need no further elucidation. [27]

Another argument presented by counsel for defendant is that there never has been any reduction to practice of the Dickinson machine, and hence that there was no completion of the inventive act, or that because thereof the thing claimed by him never eventuated into a completed invention.

Reduction to practice is but an element in an investigation for determining who is the original and first inventor, where two or more persons who have conceived a supposedly novel idea respecting a device or combination not theretofore known or used are each seeking to establish the right to a patent as the prior and first inventor. The concept is not in itself patentable, and it is only after the supposed novel device has been reduced to practice that the inventor is entitled to patent. So it is that the person who is first to conceive the invention, but is later than his rival in reducing it to practice, is not regarded as the first inventor unless he has exercised due diligence in efforts to perfect the invention at and continuously after the time his rival entered the field against him. And it may happen that the first to originate the concept, but last to reduce the device to practice, if he has exercised reasonable diligence under all the circumstances, will be entitled to the patent. 30 Cyc. 876. It results, therefore, that the original and first inventor is he who has not only first originated the novel concept, but who, through the exercise of reasonable diligence, in view of the surrounding and attending circumstances, was first to reduce it to practice.

There is no dispute here involving priority of invention. There is a dispute, however, which presents the question whether the complainant has any invention at all, [28] or an invention presenting any utility or importance. This is predicated upon the insistence of one of counsel for the defendant that there is a total inoperativeness of the machine constructed under the Dickinson patent. That the device is inoperative, if such is the case, is provable under the general issue. Reckendorfer vs. Fabor, 92 U. S. 347, 354.

Aside from the presumption that the patent affords that the Dickinson machine is operative, the testimony here satisfactorily shows it to be a fact. Complainant,

the present owner of the patent, had and still has one of the machines in his factory. He testifies that he has used it in practical operation, and that while, as originally constructed, it did not pull candy satisfactorily, yet by shortening the reach of the pull and speeding up the mechanical apparatus for moving the pins, it did the work all right, and would pull candy commercially. The change in construction to speed up the operation in no way affected the principle involved by the invention. A model has been introduced in evidence showing the mechanical operation of the machine, and it is within itself a demonstration that it pulls candy.

Take any plastic, cohesive substance, held by two objects, separately adjusted, which are made to pass a stationary intervening object, one upon each side thereof, and the substance, when contact is made with the intervening object will be caused to lap on itself and to stretch or be pulled as candy is pulled by hand. Again, when the positions of the two objects are reversed, in manner as the Dickinson device designs they shall be, one of the objects passes between the intervening or stationary [29] object and the other of the two, and another contact with the substance is made, which will cause it to stretch or be pulled, but in a less degree, because the reach of the movement is shorter. Can there be any doubt about a device of the kind, and thus operated, stretching or pulling the substance mechanically? Surely there can be none. If none, what becomes of the alleged inoperativeness of the Dickinson device? By causing the two objects to move in opposite directions past the intervening or stationary object, and to be reversed at the respective extremities, the substance will again be caused to be twice stretched or pulled, in the same way as above indicated, and thus will be completed a cycle in operation of the Dickinson device. The continued operation consists in repeating the cycles in movement of the moving objects

in relation to the stationary object. No further argument is necessary to convince one that the device is mechanically operative for pulling candy in some form. It may not be the best device possible for the purpose, but it is self-evident that it will pull candy. The question will receive further elaboration in the discussion of a somewhat correlated contention made by one of the defendant's counsel. The contention is that, while it is conceded that the Dickinson patent is valid and the device useful, yet it cannot be used to pull candy, or rather that claim 1 of the Dickinson patent is susceptible only of a narrow construction, and so construed that the Langer patent does not infringe.

No better illustration in discussion can be produced than that which comes out of the interference proceeding in the Patent Office. In the long struggle Dickinson had in the Patent Office by reason of the interference proceedings, which extended over a period of five years, five other applications for patents were at one time and other [30] involved in the controversy. In some instances, the applicants withdrew the broad claims which were said to be in conflict with those of the other inventors, and accepted patents which covered merely the special types of machines designed by them. In other cases, the question of priority was, after more or less prolonged contest, determined by the Patent Office. The five were those of Hildreth, Jenner, Thibodeau, Robinson, and Henry. The one idea common to all these applications, including Dickinson's, is that couched in the exact language of claim 1 of the Dickinson patent as finally approved and issued by the Patent Office. That the claim was considered to contain the basic principle or elements dominating the claims of all the applicants is attested by the strenuous contest made upon the part of each applicant to have it read into his patent above that of the other contestants. The Patent Office not only declared Dickinson to be the original

and first inventor of the device embodying the principle, but further declared that the principle itself was basic in character and dominated all the other devices for which applications were then pending, or at some time had been during the interference proceedings.

Brief reference will be made to the patents awarded in the interference proceedings, and attention directed to the different types.

The Hildreth device consists of two pins adjusted in a vertical position on oppositely-disposed arms of an oscillating beam, and a third in the form of a swinging pendulum. By co-operation of the pendulum with the oscillating pins, there is produced an in-and-out movement of the pins with relation to each other, which produces [31] contact with the candy, and causes a lapping and pulling of the same, and in each cycle of operation the candy is four times lapped and pulled, the same as by the Dickinson machine.

The Jenner machine is provided with five pins horizontally disposed, three of which are stationary and the other two but the handles of a crank, which are made to revolve in the same direction, so relatively disposed to the stationary pins as to move in intersecting paths, each crank pin in its revolution circumscribing two of the stationary pins. Thus contact by the pins is three times made with the candy at each revolution of each crank-pin, and the candy is accordingly lapped and pulled. Here again is found the in-and-out or intersecting movement, although the pins are horizontally and differently disposed, three being stationary and two moving.

The Thibodeau machine has four pins horizontally disposed, supported by two levers, a pair being attached to each lever, and the arms caused to rotate in the same direction. The levers have each a short arm and a long arm, and when the rotation takes place the in-and-out or intersecting movement is produced, and the candy when laid on the pins is lapped and pulled.

The Robinson machine contains three horizontally disposed pins, one of which is stationary. The other two are really crank-shaped arms, which are made to revolve about the stationary pin in opposite directions. Thus is secured the intersecting or in-and-out movement for [32] lapping and stretching the candy.

The Henry machine is much of the same order, except the crank-pins have the form of hooks, and are so called, and the cranks revolve in unison. The machine is double, having a set of pins on each side of the operating machinery, so that two batches of candy may be pulled at the same time.

Now, the principle of pulling candy is common to all these machines. They all have the intersecting or in-and-out movement of the pins acting relatively to each other, by which the candy is engaged and lapped, and stretched or pulled. This is practically the only way that candy can be pulled commercially. The idea was suggested, no doubt, by the method of hand-pulling, by which the candy is thrown over a stationary hook and stretched. Then, by holding the end in one hand, the elongated hank is seized in the center with the other, and the hank again thrown over the hook, and the pulling repeated.

What was desired was a machine that would pull candy on the same principle. Dickinson first hit upon such a contrivance by resorting to the system of pins so disposed and so operated as to produce relatively the in-and-out movement, and thus to engage the candy, and lap or stretch or pull it. None of the other machines produced in the interference proceeding did more. Some of them, perhaps all of them, pulled candy more successfully, but they all resorted to the same principle for pulling candy as did Dickinson. The in-and-out or intervening movement of the pins operating relatively to each other was found common to all, and this whether the pins consisted of [33] three or more than three, or whether they were

vertically or horizontally disposed; and the question of needed support for the candy other than the pins afforded, while the machine was in operation, was treated as wholly irrelevant to the controversy. In the light of all this, the examiner of interferences defined the issue as relating to a pioneer invention and of a generic nature broad enough to include the widely different types of machines shown in the several applications. The decision passed by the appeal to the Board of Managers in Chief, thence to the Commissioner of Patents in person, and then to the Court of Appeals for the District of Columbia, and by each of such tribunals was affirmed. The Commissioner of Patents in his decision says:

> "Dickinson seems to have the elements of the machine called for by the issue, and those elements are mechanically operative. * * * The record furnishes no justification for the conclusion that Dickinson's machine was useless, whatever conclusion may be reached as to the comparative superiority of the various machines."

The effect of these decisions is certainly sufficient to render the patent *prima facie* proof of the operativeness and utility of the Dickinson machine, whatever may be the rule generally. But, being a pioneer patent, no one could expect the operative character of the device to respond to the highest test of perfection in the art. Judge Hough has stated the principle clearly in Engineer Co. vs. Hotel Astor et al, 226 Fed. 779, as follows:

> "A device need not be perfect in order to escape the charge of inoperativeness. * * * The test of operativeness is to ascertain whether the patented device does (even lamely and imperfectly) perform the acts claimed for it in the method described and (perhaps) for the reasons given." [34]

The cases are numerous to the same purpose. See, among others, Telephone Cases, 126 U. S. 536; Mergen-

thaler Linotype Co. vs. Press Pub. Co., 57 Fed. 502, 506; Thomson-Houston Electric Co. vs. Lorain Steel Co., 103 Fed. 641, 644; Crown Cork & Seal Co. vs. Aluminum Stopper Co., 108 Fed. 845.

The claim that the Dickinson machine will stir candy, but will not pull it, and therefore that it is inoperative to pull candy is not sustained.

I have not overlooked the case of Besser vs. Merrilat Culvert Core Co., 243 Fed. 611.

Reference has been made also to the Igou patent; but it is of a type similar in construction to the Hildreth patent, and needs no further elucidation to show that it also falls within the same principle governing all as it respects claim 1 of the Dickinson patent.

The fact that the Dickinson patent is a pioneer in the art entitles it to a broad construction. Of course, it could not be broader than the claim. But a reference to the claim shows it to be broad in character, and to comprise any candy-pulling machine having a plurality of oppositely-disposed hooks or supports, a candy-puller and means for producing a relative in-and-out motion of the parts.

> "If," says the Court, in Miller vs. Eagle Manufacturing Co., 151 U. S. 186, 207, the invention is broad or primary in its character, the range of equivalents will be correspondingly broad, under the liberal construction which the courts give to such inventions."

As we have seen, the principle sought to be applied is the relative in-and-out movement of the pins so as to bring the same in contact with the candy and cause it to be lapped and pulled. The principle is basic, and dominates all machines constructed for pulling candy [35] which seek to apply it in operation.

The defendant's machine has the relative in-and-out movement perfectly, and without it the machine would not

pull candy. It is of a type, respecting the basic principle of its operation, not different from those machines considered in the interference proceeding. It is a marked improvement on the Dickinson machine, but it cannot be operated without applying the basic principle for pulling candy by machinery which Dickinson invented; and this in itself is a demonstration that it infringes the Dickinson patent. That the defendant's machine has two stationary pins and one moving, as against two moving and one stationary in the Dickinson and Robinson patents, makes no difference. The principle of the relatively intervening or in-and-out movement of the pins is applied in each, and that is the essential thing.

It is true that where two machines produce the same effect merely, no justification is afforded thereby for the assertion that they are substantially the same, or that the devices used by one are therefore mere equivalents for those of the other. This would reverse the logic in reasoning from cause to effect. But infringement, it is said, "is a copy of the thing described in the specification of the patentee, either without variation, or with such variations as are consistent with its being in substance the same thing. If the invention of the patentee be a machine, it will be infringed by a machine which incorporates in its structure and operation the substance of the invention; that is, by an arrangement of mechanism which performs the same service or produces the same effect in the same way, or substantially the same way." Burr vs. Duryee, 1 Wall. 531, 573. [36]

The principle is restated in Morley Machine Co. vs. Lancaster, 129 U. S. 273, as follows:

> "Where an invention is one of a primary character, and the mechanical functions performed by the machine are, as a whole, entirely new, all subsequent machines which employ substantially the same means to accomplish the same result are infringements, al-

though the subsequent machine may contain improvements in the separate mechanisms which go to make up the machine."

See, also, Westinghouse vs. Bayden Power Brake Co., 170 U. S. 537, 569.

Turning again to claim 1 of the Dickinson patent, its language and wording, it can be read directly upon the Langer patent, and while the mechanism is different in arrangement and in the movement of its parts, it performs the same service in substantially the same way, and the appliances adopted by the Langer patent are but mere mechanical equivalents of those used in the Dickinson machine. It results that the Langer patent infringes that of Dickinson, as it respects claim 1 of the latter patent.

Nor is claim 1 functional merely, and therefore too broad to be sustained. The reasoning of Judge Rose, in Hildreth vs. Lauer & Suter Co., 208 Fed. 1005, 1012, to my mind satisfactorily disposes of the proposition, and I need not repeat it here.

The complainant is entitled to an injunction, and the cause will be referred to the Master in Chancery to take the accounting.

Filed July 29, 1918. G. H. Marsh, Clerk. [37]

AND AFTERWARDS, to wit, on Saturday, the 21st day of September, 1918, the same being the 72d judicial day of the regular July, 1918, term of said court, the Honorable CHARLES E. WOLVERTON, United States District Judge presiding—the following proceedings were had in said cause, to wit: [38]

In the United States District Court for the District of Oregon.

IN EQUITY.

H. L. HILDRETH,

Complainant,

vs.

JIM M. MASTORAS,

Defendant.

Interlocutory Decree.

This cause having come on to be heard upon the pleadings and the taking of testimony in open court and after having heard George P. Dike, Esq., and Chester G. Murphy, Esq., for the plaintiff, and A. W. Lafferty, Esq., D. E. Lofgren, Esq., J. L. Atkins, Esq., and W. A. Robbins, Esq., for the defendant, and due deliberation having been had, it is hereby

ORDERED, ADJUDGED AND DECREED

1. That letters patent of the United States No. 831,501 to Herbert M. Dickinson, dated September 18, 1908, for candy-pulling machine are good and valid in law as to claim 1 thereof.

2. That the plaintiff Herbert L. Hildreth is the lawful owner of said letters patent No. 831,501.

3. That the defendant, Jim M. Mastoras, has infringed upon said first claim of said letters patent No. 831,501 and upon the exclusive rights of the plaintiff under the same by the manufacture, use, and sale of candy-pulling machines, manufactured under letters patent No. 1,232,697 to Langer.

4. That the plaintiff do recover of the defendant the profits, gains and advantages which the said defendant has derived, received, or made since February 1, 1911, by reason of his infringement of claim 1 of said Dickinson patent No. 831,501, and the damages which the plaintiff has suffered by reason of said infringement. [39]

5. That the case be referred to Robert F. Maguire, Esq., as Master, to ascertain and state and report to the court an account of the said gains, profits, and advantages which the defendant has received or made and which have arisen or accrued to him since February 1st, 1911, from the infringement of the exclusive rights of the plaintiff in claim 1 of said letters patent of the United States No. 831,501, by the unlawful making, using, or selling of the same as alleged in the bill, and to ascertain and report the damages which the plaintiff has sustained, if any, in addition to the profits which the defendant has received or which have accrued to the defendant since February 1, 1911, and that said Master shall report the same to this Court with all convenient speed.

6. That an injunction issue out of and under the seal of this Court directed to the defendant Jim M. Mastoras, his servants, agents, employees, attorneys, clerks, workman, confederates and conspirators enjoining and restraining them and each of them until further ordered by this Court from any further manufacture, use or sale of any machine or device embodying the invention or any substantial part thereof claimed in said first claim of the said Dickinson patent No. 831,501 and from infringing upon or violating the said letters patent in any way whatsoever.

7. That the plaintiff do recover from the defendant his costs and disbursements of this suit to be taxed.

Done and ordered this 21 day of September, 1918.

CHAS. E. WOLVERTON,
United States District Judge. [40]

State of Oregon,
County of Multnomah,—ss.

Due service of the within interlocutory decree is hereby accepted in Multnomah county, Oregon, this —— day of September, 1918, by receiving a copy thereof, duly certi-

fied to as such, by Chester G. Murphy, attorney for complainant.

JOSEPH L. ATKINS,
Attorney for Defendant.

Filed September 21, 1918. G. H. Marsh, Clerk. [41]

AND AFTERWARDS, to wit, on the 8th day of October, 1918, there was duly filed in said court a petition for appeal, with allowance of appeal thereon, in words and figures as follows, to wit: [42]

In the District Court of the United States for the District of Oregon.

No. 7466.

October 8, 1918.

HERBERT L. HILDRETH,

Plaintiff,

vs.

JIM M. MASTORAS,

Defendant.

Petition for Appeal and Order Allowing Same.

To the Honorable CHARLES E. WOLVERTON, District Judge:

The above-named defendant, Jim M. Mastoras, conceiving himself aggrieved by the decree entered herein September 21, 1918, by which it was decreed that the defendant herein has infringed upon the patent under which the plaintiff claims and that the plaintiff is entitled to the relief demanded in the complaint and that the plaintiff recover from the defendant his costs and disbursements, does hereby appeal from the said decree, and from the whole thereof, to the United States Circuit Court of Appeals for the Ninth Circuit for the reasons specified in the Assignment of Errors herewith filed, and

prays that the appeal may be allowed and that a transcript of record, proceedings and papers on which said decree was made, duly authenticated, may be sent to the United States Circuit Court of Appeals for the Ninth Circuit, and that pending the determination of said appeal said decree be suspended as to the payment of costs by defendant upon his giving bond in such sum as shall be fixed by the Court.

Dated October 7, 1918.

JOSEPH L. ATKINS,
W. A. ROBBINS,
DAVID E. LOFGREN,
Attorneys for Defendant. [43]

And thereupon it was ORDERED by the said District Court that the appeal above prayed for be allowed; and it is further ORDERED, upon the defendant giving a bond in the penalty of Five Hundred Dollars ($500.00), approved by this Court, that further proceedings in this suit pending on said appeal be stayed.

Dated October 8, 1918.

CHAS. E. WOLVERTON,
District Judge.

Filed October 8, 1918. G. H. Marsh, Clerk. [44]

AND AFTERWARDS, to wit, on the 8th day of October, 1918, there was duly filed in said court an assignment of errors, in words and figures as follows, to wit: [45]

In the District Court of the United States, District of Oregon.

HERBERT L. HILDRETH,
Plaintiff,

vs.

JIM M. MASTORAS,
Defendant.

Assignment of Errors.

The above-named defendant, having appealed to the United States Circuit Court of Appeals for the Ninth Circuit, from the decree entered herein September 21, 1918, hereby assigns the following as the errors committed by the said District Court therein, to wit:

I.

In decreeing that the plaintiff is entitled to the relief prayed for in the complaint.

II.

In decreeing that letters patent of the United States No. 831,501, to Herbert N. Dickinson, dated September 18, 1908, for candy-pulling machines are good and valid in law as to claim 1 thereof.

III.

In decreeing that the defendant has infringed upon said first claim of said letters patent No. 831,501, by the manufacture, use and sale of candy-pulling machines manufactured under letters patent No. 1,232,697 of Langer.

IV.

In decreeing that the plaintiff is entitled to recover of the defendant the profits, gains, and advantages which the said defendant has derived, received or made since [46] February 1, 1911, by reason of his infringement of claim 1 of said Dickinson patent No. 831,501 and the damages which the plaintiff has suffered by reason of said infringement.

V.

In decreeing that the plaintiff was entitled to an injunction restraining defendant from continuing to manufacture, use or sell candy-pulling machines as made by him.

VI.

In failure to recognize the prior state of the art upon which the aforesaid Dickinson patent is predicated.

VII.

In failure to require of plaintiff a complete history of the progress through the Patent Office of the application upon which the Dickinson patent aforesaid issued.

VIII.

In denying defendant's motion made before the trial for a continuance to enable him to obtain, as he offered to do, a complete history of the progress through the Patent Office of the Dickinson patent in suit.

IX.

In failure to require of plaintiff a clear showing in explanation of manifest discrepancies in the record and particularly of the presence of claim 10 of the Dickinson patent in suit after said claim had been formally surrendered upon decision rendered and requirement made by the Patent Office.

X.

In excluding testimony offered by defendant relating to the manufacture of candy and intended to show inoperativeness [47] of the machine described in the aforesaid patent to effect the pulling of candy as understood in said art.

JOSEPH L. ATKINS,
W. A. ROBBINS,
DAVID E. LOFGREN,
Attorneys for Defendant.

Filed October 8, 1918. G. H. Marsh, Clerk. [48]

AND AFTERWARDS, to wit, on the 25th day of October, 1918, there was duly filed in said court a bond on appeal, in words and figures as follows, to wit: [49]

In the District Court of the United States for the District of Oregon.

IN EQUITY—No. 7466.

HERBERT L. HILDRETH,

Complainant,

vs.

JIM M. MASTORAS,

Defendant.

Bond on Appeal.

KNOW ALL MEN BY THESE PRESENTS, That we, Jim M. Mastoras and S. Papas, surety, of Portland, Oregon, are held and firmly bound unto the above-named complainant in the sum of Five Hundred dollars ($500.00), to be paid to the said complainant or his legal representatives, executors, or administrators, to which payment well and truly to be made, we bind ourselves, and each of us, jointly and severally, and our and each of our heirs, executors and administrators, firmly by these presents.

Sealed with our seals and dated October 25, 1918.

WHEREAS, the above-named defendant has appealed to the United States Circuit Court of Appeals for the Ninth Circuit to reverse the decree entered herein September 21, 1918, by which it was decreed that the defendant herein has infringed upon the patent under which the plaintiff claims and that the plaintiff is entitled to the relief demanded in the complaint and that the plaintiff recover from the defendant his costs and disbursements:

NOW, THEREFORE the condition of this obligation is such that if the above-named defendant shall prosecute said appeal to effect, and answer all damages and costs awarded against him if he fail to sustain his appeal, then

this obligation shall be void; otherwise to remain in full force and virtue.

JIM M. MASTORAS.
S. PAPAS. [50]

Signed, sealed and delivered in the presence of
JOHN B. CLELAND.
H. B. ADAMS.

United States of America,
District of Oregon,—ss.

I, S. Papas, of Portland, Oregon, being duly sworn, depose and say that I am the surety in the foregoing bond that I am a resident and freeholder within said district, and that I am worth in property situated therein the sum of five hundred dollars over and above all my just debts and liabilities, exclusive of property exempt from execution.

Subscribed and sworn to before me this 25th day of October, 1918.

[Seal] JOHN B. CLELAND,
Notary Public for Oregon.

My commission expires Feb. 8, 1921.

I hereby approve of this bond October 25, 1918.

CHAS. E. WOLVERTON,
District Judge.

Filed October 25, 1918. G. H. Marsh, Clerk. [51]

AND AFTERWARDS, to wit, on the 8th day of November, 1918, there was duly filed in said court a stipulation relative to record on appeal, and order of Court settling statement of the evidence, in words and figures as follows, to wit: [52]

In the District Court of the United States for the District of Oregon.

IN EQUITY—No. 7466.

HERBERT L. HILDRETH,

Complainant,

vs.

JIM M. MASTORAS,

Defendant.

Stipulation Relative to Record on Appeal.

In the above-entitled cause, it is hereby stipulated by and between the parties: That transcript on appeal shall include:

Bill of Complaint.
Answer.
Petition to Court for continuance.
Order of Court denying continuance.
Opinion of Trial Court.
Decree of the Court.
Petition for appeal and order of allowance.
Bond on appeal.
Assignment of errors.
Citation on appeal.
Evidence taken before the Trial Court.
Stipulation of the parties and order of Court dated November 4, 1918.
Stipulation of the parties dated November 8, 1918.
Order of Court entered thereon November 8, 1918.

That the attached copy of the evidence taken before the Trial Court subject to approval by the Court as true and complete shall be, considering the nature of the case, accepted in lieu of any condensed statement of the evidence and shall be included as a part of said transcript of record. [53]

That writings introduced in evidence by either party shall be included in the printed copy of said transcript of record together with copies of all patents to be furnished to the clerk, and that the original models and machines introduced as exhibits by either party at the trial of this cause shall be sent by the clerk to the marshal of the Circuit Court of Appeals of the Ninth Circuit at San Francisco.

Dated November 8, 1918.

CHESTER G. MURPHY,
By JAS. L. CONLEY,
Attorneys for Complainant.
JOSEPH L. ATKINS,
Attorney for Defendant.

On approval of the foregoing stipulation of the parties, it is hereby ordered that the evidence taken on the hearing of this cause as the same appears on file be and the same is hereby approved of as true, complete, acceptable, and accepted in lieu of a condensed statement of the evidence.

That copies of all patents and writings introduced in evidence by either party shall be furnished to the clerk and included in the printed copy of said transcript of record and that the original models and machines introduced as exhibits by either party at the trial of this cause shall be sent by the clerk to the marshal of the Circuit Court of Appeals of the Ninth Circuit at San Francisco.

Dated November 8, 1918.

CHAS. E. WOLVERTON,
Judge.

Filed November 8, 1918. G. H. Marsh, Clerk. [54]

AND AFTERWARDS, to wit, on the 28th day of February, 1918, there was duly filed in said court, the testimony taken upon the trial and exhibits introduced in evidence, in words and figures as follows, to wit: [55]

Testimony of Herbert L. Hildreth, for Plaintiff.

HERBERT L. HILDRETH, called as a witness on behalf of the plaintiff, being first duly sworn, testified as follows:

Direct Examination.

(Questions by Mr. DIKE.)

What is your name, age, residence, and occupation, Mr. Hildreth?

A. Herbert L. Hildreth; 59 years old; Boston, Mass. Manufacturer of candy-pulling machines. Also manufacturer of molasses candy.

Q. Are you the plaintiff in this case, and the owner of the Dickinson patent in suit? A. I am.

Q. How long have you been in the candy business?

A. Thirty-odd years.

Q. Where is your factory located?

A. Boston, Mass.

Q. About how much candy do you make in your own factory a day?

A. We have a capacity of about four tons.

Q. Do you make more than one kind of candy?

A. We do not.

Q. What kind do you make?

A. Molasses candy, which we call "Velvet."

Q. Is that a pulled candy? A. It is.

Q. Now, will you explain shortly the process of making pulled candy?

A. The ingredients are first mixed, then boiled, then cooled, then pulled.

Q. Now, what do you mean by pulling candy? Will you [56] explain just what that process is?

A. When the candy is boiled and poured upon the cooling slab, it is cooled to the proper temperature, and it is in a dark, solid mass. Then it is taken and pulled. By pulling, it changes it from that dark, thick mass to a light, porous texture.

(Testimony of Herbert L. Hildreth.)

Q. Will you explain how the pulling is done?

A. It is done on a machine.

Q. What is the effect on the candy?

A. It changes it from the thick mass to a light in color and light in weight, making it porous, which changes the flavor and also makes the candy sweeter.

Q. I will ask you if you can illustrate what you have said as to the change in the structure of the candy, by any candy? Just tell what those samples are. (Referring to candy produced.)

A. There is what, I think, is made for butterscotch, but leaving out the flavor; that is not pulled. That is similar to any candy, that is first boiled, and thrown on the cooling slab in a hard, brittle mass. That is, it would break very easy.

Q. Now, can you show some pulled candy?

A. There is some after it is pulled, which I got here in the store. It is massed together, showing the pores in the candy; that is, you take a dark mass of candy and pull it out light like that, by its coming in contact with the air.

Q. You stated that the bulk of the candy is increased. Is that desirable? If so, why? [57]

A. Well, in many cases, very. Many confectioners sell their candy by count, making, we will say, a penny piece of candy much larger in appearance for the money.

Q. When you first went into business, Mr. Hildreth, how was candy pulled at that time?

A. Entirely by what is known as hand pulling.

Q. Will you describe how that was done?

A. There was an iron hook made and fastened to the wall about as high as a man's chin. That hook was bent downward and then up, forming a loop, or part of a loop. The candy, when it was properly cooled on the cooling-slab, was then taken by a man, the end of what we will call a "batch"—one end in each hand; then he would

(Testimony of Herbert L. Hildreth.)

put it in the center over the hook, bringing the two ends together, making one long mass of the candy. Then they would draw it down, perhaps two feet to start with, from the hook; have one end in the right hand, and take the left hand and put it in the center of that stretch of candy, and throw the center up over the hook again. Continuing that, they would get so that, when that batch became a little warmer and pulled a little more, they would pull it out six and eight feet from the hook. Then make the same revolution or process over and over until the batch was properly pulled.

Q. What objections, if any, are there to pulling candy by hand? [58]

A. There are quite a number. One is that wages are very high, and it is very costly. Another is that all men are not suitable to pull candy. It is very hard work to get men that will make proper candy-pullers; and if you do get them to pull candy, you don't get satisfactory results, because they do not do their work properly. Then again we found many men that became very sweaty. Their hands became sweaty—more or less dirty. That all worked into the candy. We found many men that had either eczema or something of that kind on their hands, and their hands split open. Then we would have to let them off until their hands got better. We found another manufacturer, if he found that you had a man that was a good workman, he would pay him more money to get him away. Then you would be deprived of that man. Another reason is that any night that a man went home you were not sure of his being back the next day: either on strike for higher wages or getting some other position.

Q. How many men did you employ to pull candy, at any one time, in your own factory, while you were pulling candy by hand? A. Twenty-two.

Q. Now, by what is candy pulled at the present time?

(Testimony of Herbert L. Hildreth.)

A. Almost wholly by machinery; by candy-pulling machines.

Q. Who invented the first successful candy-pulling machine? A. Herbert M. Dickinson.

Mr. ATKINS.—If your Honor please, does that not call for a conclusion, rather than for a fact? [59]

COURT.—That is only opening the way to further examination, I presume.

Q. Under what patent do you manufacture candy-pulling machines? You have stated you were a manufacturer of candy-pulling machines.

A. The Dickinson patent.

Q. By the Dickinson patent, you mean the patent in suit? A. I do.

Q. Does the machine which you manufacture have any advantages over the hand-pulling of candy? I don't think you need go into this in detail, but I would like to have you state in a word what advantages the machine has over the hand-pulling.

A. Well, one is, it pulls the candy better. The candy keeps longer by being pulled, because it makes it drier; makes it more porous. The machine is ready to work at all times; besides a great saving in labor, which means money to the user of the candy-pulling machine.

Q. Will you state whether or not the candy-pulling machine has made it possible to manufacture many kinds of candy which were not manufactured prior to the invention of a candy-pulling machine? A. It has.

Q. Can you give an illustration of the kind of candy? Explain why its manufacture is now possible?

A. I have a candy here called the U-All-Know Mint which, the way it is made, it could not be made properly by hand work. That candy is first boiled and then cooled cold. Candy ordinarily is pulled while it is in a warm state. But [60] that is made and thrown on to the cooler, and let it become stone cold. Then it is pulled

(Testimony of Herbert L. Hildreth.)

over the hooks by the machine. Then it is taken, to reduce it back to this creamy texture, it is put into starch and baked, or made very warm, and left there for a number of hours. That heat is what we call graining the candy. And that is grained, which makes it a cream. Otherwise, that could not be made successfully by hand.

Q. Why was it not possible to pull that candy by hand?

A. Because it has to be cold when it is pulled, and a man could not pull it. It is out of the question.

Q. How large a batch of candy does a man who is pulling candy by hand pull at one time?

A. Ordinarily from 15 pounds to 25. I have known them to pull 30 or 35, but not properly.

Q. Do you furnish candy-pulling machines for factories of more than one size? A. Yes, sir.

Q. What is the size which you ordinarily furnish?

A. The size we would call our No. 3. That pulls from 50 to 100 pounds of candy at each batch.

Q. How many of these machines can one properly attend? A. Two or three, one man.

Q. How much candy will such a machine pull in one day?

A. One of those machines will easily pull two and a half tons per day.

Q. How much can a good workman pull by hand in one day of the same kind of candy?

A. From 300 to 400 pounds. [61]

Q. What is the annual saving, as well as you can estimate it, produced by the use of a factory size, No. 3 Candy-pulling Machine over the manufacture all by hand-pulling as was done prior to the invention of the candy-pulling machine?

A. That depends wholly on the amount of candy the manufacturer wishes to produce; but ordinarily on one man's labor they will save $1,000 a year after paying

(Testimony of Herbert L. Hildreth.)

reasonable royalty and all expenses; that is, with one man working.

Q. What do you charge for the royalty on such a machine? A. Two hundred and fifty dollars a year.

Q. Do you sell machines? A. I do not.

Q. How do you put them out?

A. Put them out under license.

Q. About how many machines do you have out under license? A. Between 300 and 400.

Q. Do you know Herbert M. Dickinson, the patentee of the patent in suit? A. I do.

Q. Will you state how it was that you happened to buy his patent?

A. We had litigation in the Patent Office over the invention, and after five years of litigation, he won out. His invention was decided prior to mine. Then I bought out his invention—his patent.

Q. What did you pay for it?

A. Seventy-six thousand five hundred dollars. [62]

Mr. DIKE.—I will now offer in evidence at this point four decisions in the Interferences in the Patent Office. The first one is the decision of the Examiner of Interferences, dated May 25, 1904.

Mr. ATKINS.—If your Honor please, I enter an objection to the accepting of decisions in evidence, upon the ground that they do not adequately and fully show the record. They are conclusions and not facts, and fail to show the facts upon which those conclusions are based. A full record is available of the testimony taken, showing what construction the Patent Office placed upon the language employed, and why those constructions were placed. Without knowing what these particular decisions are, I know, from the general nature of the decisions, that they are susceptible, without the record attached, of varying construction, and might mislead, not so much this Court with evidence before it, but Courts

(Testimony of Herbert L. Hildreth.)

that might hear the case hereafter. I object to the introduction of these piecemeal decisions into the record.

COURT.—I will overrule the objection. I suppose, if these are not complete, they can be supplemented by getting what else may make them complete, so I will let them go in.

Mr. ATKINS.—They will be considered without any such supplementary decisions?

COURT.—I suppose counsel on each side will take their own course on the subject. [63]

Mr. ATKINS.—I think, then, it will be proper to reserve an objection, subject to what may be developed.

COURT.—Very well. You may have your exception. It is not necessary to save your exceptions. This is an equity case.

Mr. ATKINS.—It is not necessary in any instance?

COURT.—No, I think not.

(Paper marked Plaintiff's Exhibit 1.)

Mr. DIKE.—The second one is the Decision of the Examiners-in-Chief, dated July 27, 1904.

(Paper marked Plaintiff's Exhibit 2.)

Mr. DIKE.—The third is the Decision of the Commissioner of Patents, dated December 6, 1904.

(Marked Plaintiff's Exhibit 3.)

Mr. DIKE.—The fourth is the Decision of the Court of Appeals of the District of Columbia, dated April 4, 1905. These are all certified copies.

(Marked Plaintiff's Exhibit 4.)

COURT.—Was there any appeal from that decision?

Mr. DIKE.—No, there is no appeal from the decision of the Court of Appeals of the District of Columbia on the question of Interference. That is the court of last resort.

Q. Since the issue of the Dickinson Patent, Mr. Hildreth, have you had any litigation over it?

A. I have.

(Testimony of Herbert L. Hildreth.)

Q. State where you have brought suits on the Dickinson [64] patent and the names of the defendants?

A. In one instance we had a suit against Lauer & Suter Co., of Baltimore, Md.

Q. Where was the suit brought?

A. At Baltimore, Maryland.

Mr. ATKINS.—What was the name of the defendant?

A. Lauer & Suter.

Q. What was the result of that suit?

A. I won out. That went to appeal.

Mr. DIKE.—I will offer in evidence certified copy of the Decision of Judge Rose, of the District Court for the District of Maryland, in the case of Herbert L. Hildreth against Lauer & Suter Co.

Mr. ROBBINS.—Is that in 204 Federal?

Mr. DIKE.—I am not sure about that. This is reported.

Mr. ROBBINS.—What is the use of taking up time proving these things if they are all reported in the Federal Reports?

Mr. DIKE.—The situation is a little bit different from what it is in some cases. I want these decisions to be in the case as a matter of proof. I want it to appear of record that these decisions exist. Of course, I could refer to them in the books as mere matter of argument, but I think they should be matter of proof.

COURT.—You may introduce them.

Mr. DIKE.—I also offer in evidence certified copy of Interlocutory Decree in the case of Herbert L. Hildreth against the Lauer & Suter Co. These form one exhibit, [65] being bound together.

(Marked Plaintiff's Exhibit 5 and 6.)

COURT.—You call that an Interlocutory Decree. What was it upon—ordering an injunction?

Mr. DIKE.—Ordering an injunction. That was a decree in the District Court.

(Testimony of Herbert L. Hildreth.)

Mr. LAFFERTY.—There has been no injunction i this case against our client the defendant, the presen case on trial. There has been no injunction against th use of this machine of the defendant. He has been usin it every day in his store on Washington Street—Elevent and Washington. Probably your Honor has seen it. I has been there in use every day, in practical operation.

Mr. DIKE.—I will now offer certified copy of the Dec sion of the Court of Appeals, Fourth Circuit, affirmin the decision of Judge Rose, which I have just offered.

(Marked Plaintiff's Exhibit 7.)

Q. Now, Mr. Hildreth, have you had any other litiga tion over the Dickinson Patent besides the case agains Lauer & Suter Co.?

A. Yes. One against E. J. Smith Co., of Jacksonvill Florida.

Q. How was that case decided?

A. Decided in my favor.

Mr. DIKE.—I will offer in evidence the Opinion o his Honor, Judge Call, in the case of Herbert L. Hildret v. E. J. Smith Co., in the Southern District of Florid the opinion being dated July 28, 1916 [66]

COURT.—Is that opinion reported?

Mr. DIKE.—That, I think, is not reported. I am no absolutely sure about it, but my impression is it is no reported.

Mr. ATKINS.—If your Honor please, I do not war to be captious, but it should at least be made to appea that claim 1 was involved in these decisions. We wi admit that Judge Rose's decision, according to th printed report, involved claim 1; also involved other ma ters. It does not necessarily follow that the Jackson ville decision does involve claim 1 of the Dickinson pa ent. In order to make it pertinent, it should affirma tively appear that it does involve that claim.

(Testimony of Herbert L. Hildreth.)

Mr. DIKE.—The decision says that "The Bill of Complaint charges an infringement of claim 1 of the Dickinson Patent," almost the first sentence.

(Marked Plaintiff's Exhibit 8.)

Mr. DIKE.—I also offer a certified copy of the Final Decree in the case of H. L. Hildreth vs. E. J. Smith Co. in the Southern District of Florida.

(Marked Plaintiff's Exhibit 9.)

Q. Now, I will ask you if you remember what kind of a machine it was that defendant was using in the case of Hildreth against Lauer & Suter?

Mr. LAFFERTY.—That we object to, your Honor, as testimony as to what kind of machine was held to be an infringement. If that machine is described in these opinions, that will be the best evidence to the Court; [67] and if not, the machine itself should be brought here, or a model of the machine, or reproduction of it. This witness might testify that any particular kind of machine that he succeeded in enjoining the use of by some party in Florida— We have had no notice of it, and we object to it upon the ground that this is not the best testimony that could be offered as to what kind of machine was in dispute there.

COURT.—I think he can describe the machine, and if there is any protest against his description, why, the machine may be produced, or a model, or something of the kind. You may go ahead.

(Question read.)

A. I do.

Q. What was it?

A. Machine known as the Racine machine, under the Henry patent.

Mr. ROBBINS.—Which Lauer & Suter decision are you talking about now? There are two of them there.

A. All of them.

Mr. ROBBINS.—The same one in all the cases?

(Testimony of Herbert L. Hildreth.)

Mr. DIKE.—You better wait until cross-examination.

COURT.—Under the Henry patent.

A. The Racine people got the Henry patent, and produced their machine from the Henry patent. That is one.

COURT.—I suppose you will have the papers on the Henry patent here?

Mr. DIKE.—Yes.

COURT.—Very well; proceed. [68]

Q. How many candy-pulling arms did that machine have?

A. It had one. Well, that was a double machine.

Mr. LAFFERTY.—We object to that. The patent itself will show. They say it is here. I think it would be better to offer the patent and let your Honor see it.

COURT.—I think I will get at this clearly without. You may proceed.

A. It was a machine, double, similar to the one in the courtroom in appearance; that is, it pulled a batch of candy on each side of the machine at the same time. That is what is supposed to be a double machine. It had one stationary arm on each side of the machine, and two revolving arms on each side of the machine.

Q. Now, what sort of machine was the defendant's machine in the Jacksonville suit? That is the suit against E. J. Smith.

A. That was a machine known as the Igou Patent.

Q. Was that built under any patent?

A. Built under the Igou patent.

Q. Now, will you describe how many candy-pulling members that machine had, and what their motions were?

A. It had three. This was a one-sided machine. It only pulled one batch at a time.

COURT.—I suppose you have that patent here?

Mr. DIKE.—I think so; yes, your Honor.

(Testimony of Herbert L. Hildreth.)

A. It had two hooks, one opposite the other, that oscillated, and one swinging arm, that swung like a clock pendulum, which swung between the oscillation of the two [69] hooks, making the three hooks move.

Q. In what way, if any, do you give notice to the public of your rights under the Dickinson patent?

A. Every machine that we have put out, we have a name plate on the machine, with the word "Patented" and the date patented—the date of the patent. That is fastened right to the machine.

Cross-examination.

(Questions by Mr. ATKINS.)

You say you have been engaged in the manufacture of candy for about thirty years, Mr. Hildreth?

A. Over thirty.

Q. Do you consider yourself entirely familiar with the art of candy manufacture personally?

A. Why, I have been in it for thirty years, daily almost.

Q. You feel yourself competent to deal with practical questions of candy manufacture from your own personal knowledge and judgment? A. Quite so.

Q. You are also acquainted with candy-making machinery? A. Well, some kinds.

Q. With the kind of candy-pulling machinery?

A. Yes.

Q. You testified that, in the manufacture of candy, the ingredients are mixed, boiled, and finally pulled. Is that correct?

A. That is what I stated. I do not mean to say all candy is done that way. There is some candy that is not pulled. [70] I was talking about pulled candy.

Q. Do you wish to be understood as stating that that is the method of making what is commonly known as taffy candy?

(Testimony of Herbert L. Hildreth.)

A. Well, most manufacturers have their own idea of taffy candy. If you mean pulled candy, I do.

Q. You mean to say, then, that that is the method of manufacturing pulled candy, do you?

A. Well, do I understand you mean by cooling and pulling?

Q. I will repeat my question. You have stated that, in the manufacture of pulled candy, the ingredients are mixed, boiled, and pulled. Is that correct?

A. Yes, sir.

Q. What do you mean by the term "boiled"?

A. Why, you take your raw material, and it is boiled before it makes candy.

Q. Do you mean to say that the mixture of ingredients is brought to 212 degrees Fahrenheit?

A. Well, you cannot boil sugar to 212. That is water boiling. You have got to boil it higher than that.

Q. You cannot boil a mixture of water and sugar at 212?

A. Well, you could not boil it and make candy with it. You would make syrup.

Q. That is what I want to understand. You have said you boil these ingredients. A. Yes.

Q. Now, I want to understand what you mean by the term "boiled."

A. In order to make candy, you must boil above 240. [71]

Q. All candy? A. All that I ever saw.

Q. You cannot make any kind of candy boiling at less than 240? A. I never saw any.

Q. Can you make pulled candy by boiling to 240?

A. No, sir.

Q. Then your statement that the boiling of candy is necessary to the manufacture of pulled candy is not a complete statement? A. I should say it was; yes.

(Testimony of Herbert L. Hildreth.)

Q. And yet you say that a boiling of the candy will not make candy for pulling, as I understand?

A. I don't make any such statement. I state that the ingredients must be boiled before it can be made into candy; and different manufacturers employ different degrees to get the kind of candy that they wish. All candies are not boiled the same degree.

Q. To what degree do you consider it necessary to raise the temperature of candy mixture to produce a pulled candy?

A. Well, that depends on what the manufacturer wants.

Q. I am talking about yourself as a manufacturer.

A. Well, we will say, for illustration, 250.

Q. 250 degrees Fahrenheit? A. Fahrenheit.

Q. Will produce pulled candy?

A. Some kinds, yes. 312 will produce another kind.

Mr. ATKINS.—I think, if your Honor please, there is [72] some candy in evidence there. Is this in evidence?

COURT.—It has been alluded to or spoken of.

Q. To what extent does this candy represent the kind of candy that you make generally?

A. Well, that is not our kind at all.

Q. It is not? A. No.

Q. Have you a sample of yours?

A. No. Ours is molasses candy. Everybody knows what molasses candy is.

Q. That may be so. A. Yes.

Q. But we may perhaps indulge the Court to the extent of explaining what this molasses candy is that you are talking about. Have you any sample of molasses candy made in the way in which you make it?

A. I can tell the Court.

Q. Can you answer my question?

A. Why, no. I haven't any of the candy here. That

(Testimony of Herbert L. Hildreth.)

is three thousand miles away, where I make it.

Q. What is the highest temperature that you employ in the manufacture of molasses candy?

A. Oh, I think about 270, I think is about the highest we use.

Q. What kind of candy do you make if you carry that to 312?

A. Well, we couldn't cook molasses candy at 312. That is cooked candy—stick candy and high cooked candies.

Q. What determines the selection of a temperature in the manufacture of a candy? A. Temperature? [73]

Q. I say, what determines the selection of the temperature?

A. The man himself; probably what kind of candy he wants.

Q. If you set out to make a certain kind of candy, you have some rule for deciding what the temperature is to be? A. Oh, yes, must have.

Q. Well, will you explain that? What determines you—what controls your decision in making that?

A. Why, if we want a candy that is what we call "slack-boiled," and want it of the chewing consistency after it is finished, then we know what degree to cook it at. The degree varies according to the different seasons of the year.

Q. Is that a pulled candy, such as you have last described?

A. That is what I am speaking about, my own candy.

Q. That you would call a pulled candy?

A. Certainly.

Q. Now, what would be the ordinary temperature at which you would make such candy?

A. That varies, from 252 degrees to 270.

Q. Now, if you wanted to make a harder candy, would you use a higher temperature? A. Certainly.

(Testimony of Herbert L. Hildreth.)

Q. How much higher could you use?

A. Well, you could cook it up as high as 320 degrees.

Q. Did you not state a few moments ago that you could not make taffy candy at 312?

A. I did not. That is, I don't remember that I did. Because I did state that what one man calls a taffy candy, another man calls some other brand taffy candy. So that [74] what I call hard-boiled goods must be cooked about 280 or 290 degrees; low-boiled cooked below that.

Q. You have spoken of making molasses candy, Mr. Hildreth. You can take sugar and water and make a pullable candy, can you not? A. Certainly.

Q. Would that be included in your term "molasses candy"? A. Not a bit.

Q. When you make molasses candy, you use syrup? Is that the idea? A. What do you mean—molasses?

Q. Yes. A. Yes, that is the principal ingredient.

Q. The principal ingredient? A. Yes.

Q. Now, how do you distinguish such candy from candy that can be pulled that is made from a mixture of sugar and water?

A. You mean how do we distinguish—by color, or what?

Q. No. You say there is a difference. Now, what is that difference?

A. Well, the molasses candy has the flavor of molasses. The sugar candy has no flavor at all except sweet, unless you flavor it.

Q. But so far as the pullling quality of it is concerned, is there any difference? A. Oh, yes.

Q. What is that difference?

A. That made of sugar is pulled white, looks like snow, [75] That made of molasses is made of a yellowish—bright yellow color.

Q. Are your machines, or any of them, adapted to pull both molasses and sugar candy?

(Testimony of Herbert L. Hildreth.)

A. Yes, sir. They pulled anything that a man can pull by hand; whether it is candy, shoemaker's wax, gum, or varnish. All of those have certain parts of their business that pull similar to candy, and our machines do it.

Q. Do you know whether it is a fact that sugar and water may be mixed together and boiled to a consistency that will not admit of its being pulled, and yet make candy?

A. You cannot make candy from water and sugar.

Q. You cannot make candy from water and sugar?

A. No.

Q. By boiling it? A. No.

Q. What do you make?

A. It forms back to sugar again, crystallizes.

Q. If you stir it, are you not able to produce something that is different from the original sugar that is put into it, in appearance?

A. Oh, yes, it won't crystallize back, but the more you stir it the worse it is for you.

Q. You wouldn't call that candy?

A. You cannot make candy that way. You must have "killing." You must change the grain.

Q. It is used in the manufacture of candy, is it not?

A. What?

Q. Such a mixture? A. No.

Q. How is cream—so-called cream—of which chocolates are prepared, made? [76]

A. You must put in a "killing." You must put in either cream-of-tartar or a corn syrup. Corn syrup will not crystallize. Cream-of-tartar changes the grain so that it won't crystallize. Or you can use vinegar. You can use an acid. But you must use one of them to make candy. You cannot do it any other way.

Q. Having made such a mixture, and added what you call a "killing"—do I understand? A. Yes.

Q. You produce a candy? A. Yes, sir.

(Testimony of Herbert L. Hildreth.)

Q. That is produced by boiling? A. Yes, sir.

Q. To what temperature do you carry such a mixture?

A. It depends on what kind of candy you want.

Q. How high can you carry it and preserve its quality?

A. 320 degrees without burning. It burns at 320.

Q. All candy burns at 320? A. No.

Q. That particular candy?

A. Well, I don't think you could boil any candy made of sugar above 320 degrees, without its burning or coloring.

Q. Then, you would say that 320 degrees is the maximum temperature for making candy? A. Yes.

Q. Generally speaking? A. Yes.

Q. Including candies made with a killing?

A. That doesn't make any difference. It colors after it gets up there—burns. I don't mean burns so you would taste it; but it colors.

Q. At how low temperature can candy be made, either for pulling purposes or with the addition of a killing? [77]

A. 240 degrees is the crystal degree. That is what they use to make crystal to put over candy for crystallizing it. I never saw any pulled candy, or any other excepting that, made at 240, as that is the crystal degree.

Q. That is what you call the crystal degree?

A. Yes, sir.

Q. That is the minimum degree for making pulled candy? A. Oh, no.

Mr. DIKE.—I object to this line of cross-examination. I don't see that it has any bearing whatever on the case. I don't want to be captious, but I want to keep the case within reasonable limits. Counsel ought to state his purpose.

Mr. ATKINS.—If your Honor pleases, this is an expert introduced as being perfectly familiar with the

(Testimony of Herbert L. Hildreth.)

candy art. As has already been stated, this defendant's machine produces a certain kind of candy, and we will admit that the Dickinson machine will produce a certain kind of candy. But we propose to show that there are variations in the kind of candy, and we propose to show that that machine will make one kind of candy, but will not make another; and this machine will make the other kind of candy, but will not make the kind of candy that that makes. It will be apparent to your Honor already, I think, that there are very fine distinctions in the art. The witness is prompt to draw them, and I think the line of examination is entirely correct, since we wish to understand what their position in regard to it is. I don't believe there will be any difference of opinion [78] upon the question as to whether there are two kinds of candy; but it cannot be brought to the attention of the Court what those two kinds are—or various kinds, not limiting it to two—except by the testimony of witnesses. And this witness is apparently a very valuable witness along that line.

COURT.—Well, we are not engaged on the art of making candy. This is a machine for candy-pulling.

Mr. ATKINS.—I submit, your Honor, that it is necessary, absolutely necessary, and this is the gist of our defense, the very purpose of it, that we do go into the art of making candy; for if a machine will work and will not make candy, it certainly will not anticipate a machine that works and does make candy. Surely we must go into the question of the art, for it is a composite question—it is a candy-making machine—and a machine which will work mechanically, but will not make candy, is not a candy-making machine.

COURT.—I will hear the testimony a little while yet. I do not care to take up much time with it. If you want to go into it, you may proceed with your examination.

(Testimony of Herbert L. Hildreth.)

Q. Mr. Hildreth, in describing the operation of pulling candy by hand, you state that the candy is taken from the cooling slab? That is correct, I suppose?

A. That is correct.

Q. Do you know, and if you do know, will you state, what the object in removing it from the cooling slab is?

A. Yes. If you didn't, it would lay there, and get hard [79] and brittle, like this candy I have here.

Q. You consider it, then, necessary, to remove it from the cooling slab?

A. Oh, absolutely, if it is going to be pulled candy.

Q. Absolutely? A. Yes.

Q. Now, will you explain how the candy is supposed to be pulled in this Dickinson machine, referring to the model here, without removing the candy from the trough?

A. Why, that has a mechanism above the trough; that is not a cooling table.

Q. And is not in any sense the equivalent of a cooling table, the trough?

A. I should say not. That is a detriment—would be.

Q. The trough or the cooling table?

A. The cooling table.

Q. Is the trough a detriment?

A. That, as I understand it, originally was made with a double jacket in there for keeping the candy warm while it was being pulled, so that it would not cool.

Q. So as to keep it in a viscous state?

A. Well, partly so.

Q. That would be similar to keeping a cooling plate warm, and stirring the candy on a cooling plate, wouldn't it? A. Not a bit.

Q. Not a bit? A. No.

Q. How do you distinguish?

A. Stirring candy does not pull candy.

Q. You say that, in the use of the Dickinson machine, the candy was kept warm? [80]

(Testimony of Herbert L. Hildreth.)

A. No, I didn't say so. I said that is what the patent stated: That the double puller—that is, the double trough, was made for that purpose; but it never was used that I know of. Dickinson didn't understand what was necessary when he made that.

Q. What do you mean by Dickinson didn't understand what was necessary?

A. Well, he thought it would be a good idea to have hot water in there and keep his batch warm, but it was not necessary.

Q. Did he have any experience in candy-making machinery? A. That I cannot tell you.

Q. You don't know anything about that? A. No.

Q. You found, if he did, that it would not pull candy?

A. Oh, no, I know from knowledge of candy that that would not be the proper thing.

Q. Why?

A. Because if you keep candy hot, it won't pull. It will pull there without any hot water in there; and if it is too hot, you could put in cold.

Q. Did you ever operate, or see operated, the Dickinson machine—full operation?

A. Yes, I had one in my factory.

Q. Where is that machine now?

A. It is in my factory.

Mr. DIKE.—If your Honor please, if the purpose of this cross-examination is to prove inoperativeness of the Dickinson patent, I object to the line of cross-examination on the Dickinson machine, on the ground that there is no foundation laid in the pleadings for any such defense. I [81] will ask the defendant to point out anything in the pleadings on which he can raise the defense of inoperativeness.

Mr. ATKINS.—We depend upon the denial of infringement.

(Testimony of Herbert L. Hildreth.)

COURT.—Do you claim that this is not a useful machine?

Mr. ATKINS.—No, I do not claim that it is not a useful machine, and I do not claim that the patent is invalid. But I do claim that this machine cannot be used to pull candy.

COURT.—Well, doesn't it produce what is claimed for it?

Mr. ATKINS.—I deny that it does what is claimed for it: The presumption of innocence protects the defendant from this charge of infringement. The presumption also in favor of the defendant of manufacturing under a patent allowed by the Patent Office protects him against the charge of infringement. And I take the ground that complainant must affirmatively show, not only that he is doing the same thing, but doing it in substantially the same way, by the same means, in order to prove this question of infringement. Now, naturally, if that is so, we must understand what really this man Dickinson did.

COURT.—You claim, then, that the Dickinson machine is not an anticipation of your patent?

Mr. ATKINS.—Not an anticipation at all. That issue has not been raised, because the patent has been allowed in view of the Dickinson. [82] But the Dickinson claim is for a construction. There is no pretense that this machine is like that in construction, in mechanical feature. The attempt is, by legal construction, to make the terms of the claim so broad as to cover any three moving pins, as I understand it.

COURT.—Do you claim, then, that the Dickinson patent is so broad that it is not operative?

Mr. ATKINS.—My position is, that the claim, construed as complainant would have it construed, and as it must be construed to cover defendant's machine, is broader than anything Dickinson invented. Now, if that

(Testimony of Herbert L. Hildreth.)

is so, we must know what Dickinson invented. That the line of cross-examination. There is nothing myst ious about this position, your Honor. Dickinson clai to have made an invention. The law says that no man made an invention that is to be recognized by law until has reduced that invention to practice. I don't mean say by that that he must have used it, but he must ha demonstrated that it will work. I am prepared to br evidence to show that this will not work. And if th is any evidence to the contrary, we would like to kn what has been done. The identification in the repor cases is, that the Dickinson machine never was built, a never did operate. We want to know—and this court entitled to know—what that Dickinson machine was a what it would do, in order to determine whether the th that it was and the thing that it did anticipates that wh the defendant has made and is using. [83]

COURT.—The patent shows certain drawings.

Mr. ATKINS.—Exactly.

COURT.—Now, do you claim that claim one is broa than the drawings will support?

Mr. ATKINS.—I do.

COURT.—Therefore you claim that they really ha not a patent that will correspond with the claim?

Mr. ATKINS.—I think I ought to state it a little m definitely, your Honor. The claim is susceptible of v ious constructions. Certain constructions harmon with the specification and drawings, and will support patent; but that construction is not infringed by th What the complainant is trying to arrive at is a broader construction, which will dominate that. There are number of constructions, but there are two: Upon construction, the defendant does not infringe; upon other construction, the court might hold it broad enou to say that defendant does infringe. Now, before t

(Testimony of Herbert L. Hildreth.)

construction can be adopted that would make the defendant an infringer, it certainly ought to appear that the basis has been laid in the invention itself to support such a construction. And how can we arrive at that—how can judgment be formed without a comparison of two or more objects We have here a concrete object, that we will be prepared to show. We have presented the thing that is charged to infringe, and all we want to know is, what was represented in this invention, and have the evidence before the court to show. Now, if complainant is endeavoring to build up a property right upon pure imagination, it ought to appear to the Court. If he has [84] solid foundation to build that property right upon, the Court wants to know it. We have brought this machine here, and we show it, and here is a model which is not a reduction to practice, is not a demonstration. That does not make candy. We say there has no machine ever been built. The machines that the complainant is using in the trade to-day are different machines. They are not this machine. This is called the basic patent because it is convenient to do so.

COURT.—Those machines operate upon the same principle?

Mr. ATKINS.—It is denied that they do.

COURT.—And also get the same results?

Mr. ATKINS.—It is denied that they do. They do not operate upon the same principle—that is the point we make. We want to show that they do not operate upon this principle.

COURT.—The only question presented here, then, is of construction, as to whether Claim 1 is broad enough to cover your machine?

Mr. ATKINS.—It is a question of construction; that is, legal construction—not mechanics at all.

Adjourned until 10 A. M. [85]

(Testimony of Herbert L. Hildreth.)

Portland, Oregon, January 25, 1918.
10 A. M.

HERBERT L. HILDRETH resumes the stand.

Cross-examination (Continued).

Mr. ROBBINS.—If the Court please. I would like, with the consent of Court and counsel, to ask the witness a few questions on cross-examination.

COURT.—Very well.

(Examination by Mr. ROBBINS.)

Q. Mr. Hildreth, do I understand your direct testimony to be that the Dickinson machine is a commercial success?

A. It never was put out commercially.

Q. Never used it commercially at all?

A. No, sir.

Q. Well, have you used it to any extent whatsoever?

A. No great amount; no, sir.

Q. To what amount have you used it?

A. Well, we have worked some on it and tried it.

Q. Well, by working some and trying it, you mean just for experimental purposes?

A. Oh, no. The Dickinson machine was sent me originally by Mr. Dickinson. We took it to our factory, and Mr. Dickinson came with it.

Q. Well, do you mean to tell the court that you actually used it there in making candy?

A. We had it there in the factory perhaps a week, and maybe two weeks. But it didn't pull candy to suit me. It would [86] pull it some, but it wouldn't pull it as we want our candy pulled.

Q. As a matter of fact, you do not approve of that principle of pulling candy at all, do you?

A. Why, certainly. Every machine that is on the market has that principle.

Q. I am speaking of the Dickinson machine. You don't approve of that principle, do you? A. Yes.

(Testimony of Herbert L. Hildreth.)

Q. Have you changed your mind on that lately?

A. No.

Q. Didn't you testify under oath at one time that you did not approve of that method? A. No.

Q. You never made that statement that you did not approve of that method, did you? A. No, sir.

Q. Never at any time.

A. Never at any time.

Q. You are the same Herbert L. Hildreth that was mentioned in patent No. 832,384, are you not

A. Why, I presume so. I don't know of any other Hildreth in this litigation.

Q. Well, now, in that patent don't you use this language: "Attempts have heretofore been made to work candy in a manner analogous to that in which dough and other substances are treated—that is to say, to place the mass within a receiving or supporting chamber into which moving arms project. An example of this construction is shown in [87] United States letters patent No. 511,011, granted December 19, 1893, to P. J. G. Firchau. In such machines the mass of candy is supported in whole or in part by a chamber, and the function of the moving arms or projections is to alternately mass and stretch the material, as stated in said patent. This method of treatment and the machines which embody it are not successful or practical to produce the results heretofore obtained by hand pulling, which results must be obtained in any successful candy-pulling machine." That is your statement, isn't it? A. It is not.

Q. Whose statement is it?

A. I cannot tell you. It must be the expert's, I guess; not mine.

Q. Well, you do not repudiate this patent of yours, do you? A. No. sir.

Q. Here is the printed copy. Pardon me, I should

(Testimony of Herbert L. Hildreth.)

have shown you this in the first place.

A. Well, that is mine.

Q. This statement I was reading is found in there.

A. Yes, sir.

Mr. ROBBINS.—Have you any objection to my offering this in evidence on cross-examination?

Mr. DIKE.—None whatever.

Mr. ROBBINS.—I offer this and ask to have it marked.

(Marked Defendant's Exhibit "A.")

Q. Well, do you agree with that statement in your patent that I have just read you?

A. You mean do I state that, or that that is correct? [88]

Q. I say, do you agree with it? A. Certainly.

Q. Now, Mr. Hildreth, you stated on direct examination, I believe, that you had had considerable litigation over different patents at different times. That is correct, isn't it?

A. I think I stated yesterday I had had two cases.

Q. You don't want the Court to understand that two cases are all you have had, do you?

A. No, I have had a great many.

Q. Well, have you prevailed in all of those cases that you have had? A. Yes.

Q. You have? A. Yes.

Q. Well, now, there is a case of Hildreth vs. Sparks, away back in 1899. What was that case about? That was down there in New York.

A. You mean on a candy-pulling machine?

Q. No, I am asking you what it was about. You are telling the Court what cases you prevailed in. Now, what other cases had you?

A. I am talking about cases on candy-pulling machines. Sparks is not a case on a candy-pulling machine.

(Testimony of Herbert L. Hildreth.)

Q. Well, that was an unfair competition case, wasn't it? A. That was a trademark.

Q. Did you prevail in that case?

Mr. DIKE.—I object to this line of cross-examination. I do not think, in view of the subject-matter of this suit, that trademarks or unfair competition are pertinent.

Mr. ROBBINS.—I quite agree with counsel, and I [89] objected when he put in these decisions that were reported in the Federal courts. When this man has testified he prevailed in those cases, we have a right to go on and show, on cross-examination, that he has not prevailed in all these cases; that there were other cases on which he lost out.

COURT.—Does that trademark case have any relation to this patent?

Mr. ROBBINS.—Only incidentally. No, I should say not.

COURT.—I don't see why you should introduce it in evidence.

Q. You also had a case of Hildreth vs. Thibodeau.

A. Well, not on an infringement.

Q. That was a specific performance case?

A. That was in regard to a contract.

Q. A man was working for you and you had a contract with him that you were to have all the patents he invented? A. Yes.

Q. That is the substance of it? A. Yes.

Q. You didn't prevail in that case, either, did you?

COURT.—Did that involve this patent here?

A. No, your Honor.

COURT.—Or anything like it or similar to it?

A. No, your Honor.

COURT.—I don't see any use in that.

Mr. ROBBINS.—The Thibodeau patent comes into this [90] discussion, your Honor, before we get

(Testimony of Herbert L. Hildreth.)

through. We will find that this gentleman is the owner of the Thibodeau patent.

COURT.—I suppose those decisions in the cases heretofore offered in evidence were to show that this matter had been contested, as these patent rights very often are, and that those cases are what finally establish the patent. That is the reason those were allowed in evidence.

Mr. ROBBINS.—That is true, your Honor, but there is a lot of necessary history attached to those decisions, which it is necessary for you to know. Personally, I think your Honor can read them out of the books as well as we can. But they have opened the way, and now I think I have a right to go ahead and show the whole transaction.

COURT.—You have a right to do that perhaps, but I do not see how these cases that have no relation to the patent could have any effect in this case.

Mr. ROBBINS.—The Thibodeau patent does have relation to it, your Honor, The Thibodeau patent is very material in this discussion.

Mr. DIKE.—If your Honor please, while the Thibodeau patent may be material, I don't see how any litigation over a contract for specific performance could have any bearing on this case.

COURT.—It doesn't establish the patent.

Mr. ROBBINS.—No, it doesn't establish the patent, but shows your Honor the whole transaction leading up to these patents, and how this man became the owner of all of them.

COURT.—The ownership is not denied. That is not [91] an element in this case. If we get to going too much astray, it will take a very long time to try this case.

Mr. ROBBINS.—I quite agree with your Honor. That is the reason I objected here in the beginning.

Q. Now, you also had a case of Hildreth vs. Norton

(Testimony of Herbert L. Hildreth.)

down there in New York in the Circuit Court, didn't you? A. On an infringement, yes. Yes.

Q. Now, that involved what you termed here yesterday the Igou patent, didn't it? A. Yes.

Q. The injunction was denied in that case, wasn't it? You asked for an injunction there against the Igou, and that was denied, wasn't it?

A. That was on the preliminary hearing.

Mr. ROBBINS.—Yes. For the information of the Court I will say that is reported at 154 Federal, 82.

Q. Now, later, you had a case of Hildreth vs. Curtis & Son. That was along in 1897. You asked for an injunction against the Igou patent again, didn't you?

A. Yes.

Q. After it had been assigned to the Standard Candy Co.? A. I think so. We got the injunction.

Q. You did?

A. Yes, sir. We got the injunction from Norton.

Q. How about the Hildreth patent? You lost as to the Hildreth patent, but won as to the Dickinson patent?

A. That was the lower court.

Mr. ROBBINS.—That is in 157 Federal, 394, your Honor.

Q. Well, now, how about the case of Hildreth vs. Norton, [92] where you applied for a preliminary injunction?

A. I think the preliminary injunction was denied, but later an injunction was granted.

Mr. ROBBINS.—That was in 159 Federal, 428.

Q. Now, how about Hildreth vs. Bee Candy Manufacturing Co.—that Texas case you were talking about?

A. The injunction was granted.

Q. Did that go to the Circuit Court of Appeals too?

A. I think not. The Judge decided it that day.

Mr. ROBBINS.—That is in 162 Federal, p. 40.

Q. Now, in that case of Hildreth vs. Auerbach et al.

(Testimony of Herbert L. Hildreth.)

That is in the District Court of New York.

A. Injunction was granted.

Mr. ROBBINS.—That is 200 Federal, 972, your Honor.

Q. Well, there was a second trial of that, or did that go to the Circuit Court of Appeals?

A. I won't say, but I think it went to the Court of Appeals.

Q. Well, it was reported again in 223 Federal, 546. I am not sure whether that is the Circuit Court of Appeals or another trial of the same case.

Mr. DIKE.—It went to the Circuit Court of Appeals.

Q. Well, now, you spoke about the case of Hildreth vs. Lauer & Suter. Is that the name?

A. Lauer & Suter.

Q. There were two cases of that name, weren't there?

A. Well, there might have been. It was several years litigation.

Q. As a matter of fact, you lost the first one, didn't you? A. I might have on the preliminary. [93]

Q. Well, on final hearing you lost it?

A. Well, I cannot say.

Mr. ROBBINS.—That is reported in 204 Federal, 792, and it is affirmed in 213 Federal, 788. I understand, Mr. Dike, that you make no point about offering any exhibits on cross-examination?

Mr. DIKE.—It depends on what they are, sir.

Mr. ROBBINS.—Some of the patents here that have been discussed. I will be glad to show them to you.

Mr. DIKE.—I shall object to the offer of any prior art patents on cross-examination, or any examination as to prior art on cross-examination.

Mr. ROBBINS.—We do not insist on that on cross-examination, if there is any objection at all. I have no right to put it in on cross.

(Testimony of Herbert L. Hildreth.)

Q. Now, Mr. Hildreth, the machine that you are using commercially, and licensing, as you say, for $250 a year, which one of the patents is that? That is not the Dickinson patent?

A. That is made under the Dickinson patent, all of them.

Q. What is the character of the machine? That is, it does not look like that machine, does it?

A. It does not look like that machine, to look at it.

Q. It does not operate like it either, does it?

A. Yes, they all operate the same; that is, the principle.

Q. As a matter of fact, that is a cut of the machine you are using commercially, isn't it? (Showing witness cut). A. One of them.

Q. What is the other one? [94] A. Like that.

Q. Like that?

A. Yes. That is, it looks similar to that.

Q. Where have you got a machine like that?

A. We have it.

Q. Where is it?

A. We have it here. I don't say the machine looks just like it; but it is a double working machine, and a person could not tell to look at it, but they worked the same.

Q. That is what you call the Racine patent?

A. Yes.

Mr. ROBBINS.—I offer this cut in evidence.

(Marked Defendant's Exhibit "B.")

Q. Have you got a copy of the Racine patent with you?

A. I have not.

Q. Have your attorneys?

A. There is no Racine patent.

Q. Well, then, what do you mean?

A. It is the Henry patent. Henry is the one that invented what is called the Racine machine.

(Testimony of Herbert L. Hildreth.)

Mr. ROBBINS.—Mr. Dike, have you an extra copy of that?

Mr. DIKE.—I have not an extra copy of that. The only copy I have is on the back of the file-wrapper. I was going to offer the file-wrapper for the purpose of the patent, with leave to substitute a simple copy. I do not want the whole file-wrapper in.

Mr. ROBBINS.—With that understanding, I will pass that. He says he is going to introduce that himself. I [95] haven't a copy of it here.

(Examination by Mr. ATKINS resumed.)

Q. You say that a machine has been built embodying all the features of the Dickinson patent?

A. Well, I won't say all the features.

Q. It somewhat resembles the Dickinson patent?

A. No, not in appearance.

Q. There *has no* machine resembling the Dickinson patent been built?

A. There isn't two machines that resemble each other on the different patents in looks.

Q. Has an embodiment, a mechanical embodiment of the subject matter of the Dickinson patent ever been built, so far as you know?

A. Not to look like it, no.

Q. Then the resemblance was an inferred resemblance made by yourself?

A. The resemblance has nothing to do with the working of a machine, you know.

Q. That is a conclusion on your part, is it not, an inference? A. Perhaps so.

Q. The machine itself was never built?

A. You mean the Dickinson?

Q. The Dickinson machine

A. It certainly was.

Q. Well, now, it certainly sounded to me just now as if you said it had not been built. Will you explain what

(Testimony of Herbert L. Hildreth.)

you mean by that? You say the Dickinson machine has not [96] been built?

A. I don't think I ever said so.

Q. What did you mean? If you make it clearer, perhaps we will understand each other.

A. Perhaps you better refer back to what was stated. I stated yesterday that I had one of those machines in my factory.

Q. But it didn't look like the machine shown in the Dickinson patent? A. Oh, yes; oh, yes.

Q. In what respect did it look like it?

A. Why, as near like the patent as they could build it.

Q. Do you mean to say it was a practical mechanical embodiment of the machine shown in the Dickinson patent? A. Why, it looked like the patent; yes.

Q. I understood you just now to say that it did not look like it; that the machine did not look like the Dickinson patent.

A. No, I understood you to ask me about other machines.

Q. Oh, there was where the misunderstanding arose. Then you say there was a machine built? There has been one machine built that is a substantial mechanical embodiment of the machine described in the Dickinson patent? A. Yes, more than one.

Q. Well, in all respects are these machines like the Dickinson patent?

A. Yes, sir, as far as I know.

Q. What? A. As far as I know. [97]

Q. Now, how many machines of that description have been built?

A. Well, three to my knowledge.

Q. Are they in existence to-day.

A. One of them is.

Q. What has become of the other two?

(Testimony of Herbert L. Hildreth.)

A. Broken up, I suppose.

Q. Broken up? A. Yes.

Q. There is only one now in existence?

A. Well, as far as I know.

Q. And, so far as you know, only three in all have been built? A. As far as I actually know.

Q. Have you any reason to believe that others had been built?

A. Well, I understood from Dickinson he built quite a number of them, but I don't know that he did. I do know of three.

Q. You bought the Dickinson patent?

A. Yes; but not from Dickinson.

Q. But not from Dickinson? A. No.

Q. From his assignee? A. Yes.

Q. So far as you know, then, there is but one machine in existence that embodies in form the subject matter of the Dickinson patent?

A. That is built to look just like the patent.

Q. Where is that machine now?

A. In my factory.

Q. Will it operate? A. Yes, sir.

Q. Do you use it in practical operation? [98]

A. No, we do not.

Q. Have you ever used it in practical operation?

A. We have.

Q. To what extent?

A. To pull candy. We made a change.

Q. How much candy?

A. Well, we pulled 60 or 70 pounds at a time. We changed that machine a little bit, that long pull there, we shortened up that pull, and speeded the machine. This is after it was in my factory, a number of years after I bought it. By doing that, it pulls candy all right.

Q. Would it pull candy as shown in the patent?

(Testimony of Herbert L. Hildreth.)

A. It will pull it some, yes; but it don't pull it as well as our machine pulls it.

Q. Will it pull it practically?

A. Well, practically would be so it would be commercial.

Q. Well, would it pull it commercially then?

A. Well, not the way we pull our candy. It was not pulled enough. It would pull it, but the stroke was too long. We shortened up the stroke, and made it all right.

Q. Then you base your inference of the relationship of this Dickinson patent to the art entirely upon this one machine, so far as practical experiment goes?

A. Well, I think that is what this case is brought on. That was the first candy-pulling machine that was ever invented.

Q. And that would not pull candy until you changed it? A. Oh, yes, it would.

Q. It would not pull it commercially? [99]

A. Well, no, it would not pull it, not as well as we wanted candy pulled.

Q. Exactly; and if you depended upon that machine in the art, you would not have been able to make the commercial success of candy-pulling machines that you have made?

A. Oh, I think I should, because if I had owned that machine at the time it first came to my factory, and had made the changes that I made afterwards, just shortening the stroke, we would have had the candy-pulling machine successful.

Q. Exactly; if you had had control of that machine, and had made a different machine of it, you would have made a success of it? Is that your answer?

A. No, it would not have made a different machine.

Q. You say you would have made changes that would have made it a commercial success?

(Testimony of Herbert L. Hildreth.)

A. Simply shortened up the stroke. It does not affect the principle of the thing at all, any more than opening a door half way to let a big man through; he cannot get through; you open it up wide and he can get through.

Q. How long is the trough approximately of this machine that you refer to?

A. Oh, I think it is seven or eight feet.

Q. And how wide?

A. Well, perhaps 18 inches. Possibly wider.

Q. How deep? A. Several inches.

Q. Twelve inches?

A. Well, I wouldn't undertake to say. It is several inches.

Q. Would you say it was more or less than twelve inches? A. Well, I couldn't tell you. [100]

Q. You simply don't know?

A. No, I don't think I ever measured it.

Q. When have you seen that machine last?

A. Perhaps two weeks ago.

Q. You don't remember whether it was twelve inches deep or what it was? A. No.

Q. Was it two inches deep?

A. Oh, yes, it was deeper than that.

Q. Three inches.

A. Oh, I should say it was, yes, deeper than that. I didn't look at the machine to take measurements. I was downstairs and saw the machine there and knew that it was there.

Q. Well, is there any reason why you should remember the length and width of it and not remember the depth of it? A. I told you several inches.

Q. Well, that doesn't mean anything. Two inches are several inches.

A. Well, we will say, on a guess, ten inches.

Q. Ten inches. You will admit at least that it was ten inches deep? A. No, I won't.

(Testimony of Herbert L. Hildreth.)

Q. Well, then, your guess means nothing again.

A. I told you so. I don't know.

Q. Well, is there any reason why you remembered the length? A. I didn't remember the length.

Q. And width, and didn't remember the depth?

A. I told you, approximately, as I guessed it. I didn't [101] measure it.

Q. Are you willing to admit that this trough was not less than ten inches deep?

A. Well, yes, I think so.

Q. It may have been 18 inches deep?

A. No. No, I am quite sure it was not.

Q. Well, it was a depth not less than ten inches, you think? A. Well, I won't say that even.

Q. And you remember the length and breadth of this trough, but you don't remember the depth of it?

A. No, I only estimated it. I don't know the length or the breadth.

Q. Now, referring to this cross-bar here on the model. I understand that that machine looks like this model?

A. Well, yes. Yes.

Q. This model is substantially a reproduction of that machine?

A. Well, to all intents and purposes, yes; although, if I remember, the outside trough there was oval, the end oval instead of square. That seems to be square. Although I may be mistaken.

Q. The outside trough?

A. That is supposed to be a model of the big machine.

Q. As it is built and the one you are taking about?

A. Yes. Yes. I never compared them, that I know of.

Q. You say you think the bottom of the Dickinson machine is oval instead of squared off?

A. No, I don't think the bottom was. But the sides, if I remember right, appeared to be oval.

(Testimony of Herbert L. Hildreth.)

Q. Slightly dished towards the bottom? [102]

A. Yes. But I think the bottom was flat the same as that machine there.

Q. Now, referring to this model, and assuming that it is a correct representation of the machine that you refer to, this cross-bar here—I think it better be identified a little more closely—this cross-bar here, which is identified in the patent as the plate E', moves back and forth from end to end of the trough? Is that correct?

A. That is correct.

Q. That was in the machine as originally constructed?

A. It was.

Q. Now, you say that you shortened the stroke of that cross-bar, as I understand?

A. No, shortened the stroke—

Q. Shortened the driving stroke on the cross-bar, to be more exact? In other words, you have made that cross-bar travel less distance? A. In distance, yes.

Q. Yes. That was what I meant by the shortening of the stroke.

A. Well, it stopped. It didn't let the screw take it so far back; stopped it, and then had the reversing come closer.

Q. Well, what I meant was the reciprocatory stroke back and forth. You shortened that?

A. Yes, just exactly.

Q. And to what extent have you shortened that stroke? Proportionately is sufficient.

A. Oh, I should judge half.

Q. So that instead of going as near to the end of the [103] trough as it did, it cuts that distance about in half? A. Yes.

Q. Do you know—if you will allow me to use the term stroke of the cross-bar—what the original stroke of that cross-bar was? What the distance it travelled?

(Testimony of Herbert L. Hildreth.)

A. Well, it travelled from end to end, so there must have been nearly eight feet.

Q. Nearly eight feet?

A. Yes, if the trough was eight feet, somewhere in that neighborhood.

Q. And you have now made it to travel about four feet?

A. I should say about four feet.

Q. If the trough was eight feet long? A. Yes.

Q. You don't know just what the travel is?

A. Never measured it.

Q. Now, you have taken the position, as I understand you to say, that the Dickinson patent is entitled to so broad a construction as will dominate all the machines that you are putting out in this candy-pulling art?

Mr. DIKE.—I object to that. I cannot see how that has any bearing. That is a question of law rather than of fact. I cannot see how it can have any bearing on the case, so far as this witness is concerned.

COURT.—That is a construction for the Court, isn't it?

Mr. ATKINS.—Possibly, your Honor. I didn't know there would be any objection. It doesn't make any difference whether it is answered or not, as far as that is concerned. I merely wanted to bring to the attention of the Court just [104] the attitude of the owner of these patents in respect to this particular patent, and if it is unfortunately framed in point of language so as to infringe upon the prerogative of the Court, I will apologize to the Court.

COURT.—No apology is necessary. We are trying to get at the truth of this thing.

Mr. LAFFERTY.—I should like to ask at this time if that is counsel's position?

Mr. DIKE.—I will deal with that matter in my argument at the proper time, if the Court please.

COURT.—I will allow you to ask the question and see what this witness says about it.

(Testimony of Herbert L. Hildreth.)

(Question read.)

A. Any other machine that has the principles of the Dickinson patent, I certainly do.

Q. I understood you to say on the stand that all these machines have the Dickinson principle—all these machines that you are putting out have the Dickinson principle?

A. Everyone that we have ever seen. You cannot pull candy any other way.

Mr. ATKINS.—Well, that will bring it squarely before the Court.

Q. How many machines are you actually manufacturing for commercial use? I mean, how many types of machines? A. Two.

Q. And no more? A. No.

Q. Have you any means of showing to the Court what those two types of machines are, at your command? [105]

A. Why, I think my counsel have cuts of them, so that you can see, which he will put in later.

Mr. DIKE.—I don't know that it is proper cross-examination, but I intend to put them in on redirect, so I don't object.

A. That and that is supposed to be the same.

COURT.—That is this machine here, isn't it, practically?

A. Yes, sir. Simply a different sized machine. That one there is the double machine principle. There is a stationary hook—this is a stationary hook, that has two hooks revolving this way around the stationary hook, and you pull out one batch on that side and one on this side, so that you pull two batches at once. That style machine and this style are the two.

COURT.—These are the hooks revolving in the opposite direction? A. Yes, your Honor, these two.

(Testimony of Herbert L. Hildreth.)

COURT.—Those machines there, you have no patents on? A. Yes, we have.

COURT.—You have on those? A. Oh, yes.

COURT.—You say that those are built upon the same principle as the patent that we have here that has been introduced in evidence? A. Yes, your Honor.

COURT.—Involves the same principle?

A. Involves the same principle.

Mr. DIKE.—I may say, your Honor, that that second machine is built in accordance with the Henry patent, and [106] is of the type of machine known as the Racine machine, which was used by the defendant in the suit against Lauer & Suter in Baltimore, which went to the Court of Appeals there, and which was held to infringe the Dickinson patent.

Q. The Style R machine, as you have shown here, is built under the Henry patent No. 731,681, is it not?

A. Yes.

Q. And that is what you call the Racine machine?

A. Well, the principle is the same principle as the Racine machine. The machine does not look like it.

Q. The same principle. Do you mean to say it does not look like it in every detail?

A. Yes, that is what I mean.

Q. But in its operative element, it is the same?

A. Oh, yes. Yes.

Q. You own the Henry patent No. 731,681, do you not?

A. I do.

Q. When did you buy the Henry patent?

A. I didn't buy it. It was turned over to us. We defeated the Racine people—they were infringing—and it was turned over to us.

Q. You never bought the Henry patent? A. No.

Q. How did you obtain title to the Henry patent?

A. It was assigned to us.

Q. Assigned to you? A. By the Racine people.

(Testimony of Herbert L. Hildreth.)

Q. Without consideration?

A. Well, we notified them that they were infringing and we were going to bring suit. They were advised by their [107] counsel that we would defeat them, so they came in and we made a settlement involving many machines that they had out, they had already sold; so we made arrangements whereby they could settle with the people whom they had sold to—satisfy them, as well as make it easier for the Racine people.

Q. Did you pay them any money in the settlement?

A. Why, in a way we did. We did it in this way: If I remember correctly, the people who had bought their machines, and paid them a certain price for them, and had had the machines say three years, they made a settlement with them allowing those people the amount that they paid the Racine company for the machine, and then they assigned the machines over to me, and took them under a lease. And I think for the first year's lease we gave that to the Racine people for their trouble, etc., in getting the machines turned over—I think that was the arrangement—so they paid themselves you might say.

Q. So this payment entered into the consideration for the assignment of the Henry patent to you?

A. Why, no, I won't say that, because the Henry patent was no good to us, any more than to get it in out of the way.

Mr. DIKE.—I object to this cross-examination. I cannot see how it has any bearing whatsoever on the case. The Henry patent is not in suit, and therefore the transactions relating to the Henry patent have no bearing whatsoever. I am disposed not to object—to allow as much latitude as possible—but it seems to me this cross-examination must be kept within reasonable limits. [108]

Mr. ATKINS.—This line of inquiry is pertinent for this reason, your Honor, if for no other: There is a Henry

(Testimony of Herbert L. Hildreth.)
patent which is owned by Mr. Hildreth, and one of the machines that were built was built in substantial conformity with the Henry patent. Now the attempt is made to show that the Henry patent comes under the principle of this alleged invention of Dickinson. This Dickinson patent is nothing but a paper patent. It is already, I think, apparent to your Honor, that this Dickinson patent is nothing but a paper patent, and has not gone into practice. They have certain practical machines, and we want to have it appear that one of the machines—one of the three types of machine, or two types, as the witness said—there seemed to be three upon this showing—is built under the Henry patent. Now, a great deal of stress has been laid upon the fact that a Court in Maryland has found that the Dickinson patent is broad—a basic patent. The Court so held. But that suit was brought upon the Henry patent—brought upon a machine built in accordance with the Henry patent. The Henry patent was in interference with Dickinson, or at least the opportunity was presented to Henry to contest this interference; and he was estopped. Therefore the court was bound, by that estoppel upon Henry, to find, that so far as Henry was concerned, it was a broad basic patent. Now, we want to show just exactly what relation this Henry patent bears to this.

COURT.—Did that Court hold that the Henry patent was an infringement?

Mr. ATKINS.—Yes, it held that the Henry patent [109] was an infringement of this patent, because in every instance it says, "In view of the record in this case." Now, Henry had an opportunity to be heard; he declined to be heard; and therefore, so far as the Henry patent was concerned, he was estopped from denying that the terms of this interference covered what he had.

COURT.—Well, do you claim that these patents that are being used now by the plaintiff in this case are really

(Testimony of Herbert L. Hildreth.)

infringements upon the original patent, or that they are not built in accordance with it?

Mr. ATKINS.—Each of these machines—if I follow your Honor, each of these machines represents a distinct type of machine.

COURT.—Yes, but does it represent a distinct principle? Are the principles different from those machines used here and the principle involved in the parent patent?

Mr. ATKINS.—Our position is that there is no development of a broad principle for practically pulling candy in the Dickinson patent. Now, each of these types of machine is covered by an independent patent; and whether the plaintiff succeeds in having this declared a broad patent or not, they still have certain protection upon these different machines through the patents which have already issued, and which the complainant in this case owns.

COURT.—Well, is the patent, or the claim for the patents in these later machines any less broad than the parent machine—the parent patent? [110]

Mr. ATKINS.—Necessarily, since two patents for the same invention cannot be issued under the law. There is a generic claim which may be issued, and specific claims of more or less generic scope, of course, which may be issued. Now, the attiture, as I understand it, of complainant is that the Dickinson represents the broad generic claim which covers all of these different machines as species. If that prevails, they will have a broad generic claim to protect them, and they have the specific claims of the specific patents. Now, in order that your Honor may pass upon this question, it seems to me that the specific claims of the specific patents should be before the court; and that is what we are trying to bring out now in regard to this Henry patent. That is the first question that was raised on that.

(Testimony of Herbert L. Hildreth.)

COURT.—Well, is there anything else involved in this litigation except this parent patent?

Mr. ATKINS.—Nothing except the parent patent and the construction of the parent patent.

COURT.—Yes. And they say that your machine infringes that patent?

Mr. ATKINS.—They say that our machine infringes that patent.

COURT.—So the whole question devolves upon the principle involved by the parent patent; and if you are using that principle, then you are infringing; if not, you are not infringing. Isn't that the sole question in this case?

Mr. ATKINS.—I think that that fairly presents it. [111]

COURT.—I think we can reduce the inquiry considerably if we confine ourselves to the matter really in issue here.

Mr. ATKINS.—If your Honor please, in order to determine what these other principles are, and to compare the principle of one invention with the principle of another, to determine whether they are identical, it seems to me that there is no better means of comparison than to study the patents in which those principles are set forth. That is the whole purpose we have in bringing those patents in.

COURT.—Well, you can introduce the patent, but I don't think you better take up much time in the examination. What we want to get at is the principle.

Mr. ATKINS.—The patent may be introduced, then?

COURT.—You may introduce them, so the Court may have them to look at by way of comparison.

Mr. ATKINS.—I would be permitted, of course, to identify the patents with the types of machine?

COURT.—Oh, yes, if you desire.

Q. By permission of the Court, I understand, Mr. Hil-

(Testimony of Herbert L. Hildreth.)

dreth, that the Style R of your machine is substantially shown in the Henry patent 731,681.

Mr. DIKE.—Show him the patent.

Mr. ATKINS.—I don't want to introduce this on cross-examination.

Mr. DIKE.—Well, show him the patent.

(Copy of patent submitted to witness for examination.) [112]

A. Yes, that is right. That is the Henry patent.

Q. You own this Henry patent? A. I do.

Q. When did you take assignment to the Henry patent?

Mr. DIKE.—I object to that. I cannot see how that has anything to do with it.

COURT.—I thought he had explained that.

Mr. ATKINS.—I think not, your Honor.

COURT.—Do you recall the date when you came into that patent?

A. I do not, no. It might have been ten years ago, or eight years ago; along there. I couldn't tell— I don't know exactly.

Q. Style A of your machine is represented in a specific patent, is it not? A. Yes.

Q. What patent is that, if you remember?

A. The Thibodeau patent, I think.

Mr. DIKE.—To shorten the examination, I will admit that that Style A is made in accordance with the Thibodeau patent No. 857,770, dated June 25, 1907.

Q. Are you the owner of that Thibodeau patent?

A. I am.

Q. When did you obtain title to it?

A. I do not remember. Quite a number of years ago.

Q. About the same time you took over the Henry patent? A. No, I don't think so.

Q. Earlier or later?

A. I think it was earlier. [113]

(Testimony of Herbert L. Hildreth.)

Q. About the same time you took over the Dickinson patent?

A. Well, I couldn't say. Those things came along at different times, and I do not remember.

Q. When did you obtain title to the Dickinson patent?

A. That I don't know. I don't remember.

Q. Was it about the same time that you took title to the other patents?

A. I told you a moment ago I did not remember.

Q. Well, you know approximately. Was it yesterday? What I want to know is whether it was a recent or remote occurrence? A. Oh, no, it was years ago.

Q. And about the time you took over the other patents?

A. Well, along within a number of years.

Q. Along about that time?

A. It stretched along there for years, you know.

Counsel for complainant stipulates that Style D of complainant's machine is substantially the same as Style A, and both under the Thibodeau patents.

Q. So that while there are three cuts of machines here, that does not alter your statement that the types of your machine are only two in number—your commercial machine? A. Only two?

Q. Only two. A. Yes.

Q. It is your practice to lease your machines exclusively, and not to sell them? A. Yes, sir.

Q. All leased machines are marked with patent plate, are they? [114] A. They are.

Q. Can you state what that patent plate shows in its entirety? A. No, I cannot.

Q. You have stated that you marked all your machines with the number, I believe, and the date of the Dickinson patent?

A. The word "Patented" and date of patent. Every plate has that on.

Q. And that was with reference to the Dickinson

(Testimony of Herbert L. Hildreth.)

patent? Your patent plate includes other numbers than the Dickinson patent, does it not?

A. I think so, yes.

Q. Do you know how many numbers it includes?

A. No, I couldn't tell you. Maybe five or six.

Q. Maybe more? A. Maybe.

Q. It is your purpose to apply in this plate the numbers and dates of all the patents which you own, is it not?

A. Well, I won't say that, because I don't know.

Q. Well, which you own applying to that type of machines? Of course you may have some machines to which it would not be applicable.

A. Well, I don't know about that even.

Q. You don't know that that is your purpose?

A. No.

Q. What is your purpose in making this patent plate?

A. Why, it is to notify, according to law, to notify the trade that it is patented.

Q. And identifying the patents? A. Yes.

Q. Now, you do not mark any machine with the number of the [115] patent in suit, the Dickinson patent, by itself, do you?

A. Yes, on every plate that goes out.

Q. And nothing else but the number on the plate?

A. Oh, I won't say that. There may be others on it.

Q. In other words, you have a blanket notice with all these numbers on it, including the Dickinson?

A. Yes.

Q. And that is all that you meant by stating that you marked your machines with the notice of the Dickinson patent? A. It is enough, isn't it?

Q. Do your machines bear any other legend than the patent notice that you refer to?

A. Oh, yes. It gives our address, if I remember correctly. It also gives the number of the machine; that is, we number those machines consecutively up. And if it

(Testimony of Herbert L. Hildreth.)

is a machine that has a motor, it states what kind of a motor on it; and the number, I think. It has a regular name plate, stamp plate, put out for each machine specially.

Q. What is that name plate?

A. That is just what I have been telling you.

Q. Well, I see in the cut of Style A here what appears to be a name plate, or I should call it a name plate, "Hildreth's Patent Pulling Machine, Boston, Mass. U. S. A."

A. No, that is a framework that was put down underneath there to protect the motor from people getting against it; so, in order not to have it plain, we simply put an advertisement on it.

Q. But the machines carry that, do they?

A. Well, certain ones; the small machine there. [116]

Q. That is a correct representation of Style A as you put it out?

A. I think so, yes. But the name plates are different. The name plates go upon the machine.

Q. You are an inventor yourself, are you not, Mr. Hildreth, in this art? A. Yes, I invented one machine.

Q. That invention is set forth in United States letters patent 832,384, is it not?

A. I cannot tell you. You probably have it before you.

Q. I show you copy of patent referred to, and ask you.

A. That is the one.

Q. That is the only patent that you yourself have taken? A. Yes.

Mr. ATKINS.—If your Honor please, this patent has not yet been offered in evidence, but I suppose it will be offered in evidence by the other side, or when we come to take our testimony, we will put these patents in. With that understanding, I think it best not to introduce them on cross-examination. With that understanding, I will proceed to examine the witness in regard to the patent—

(Testimony of Herbert L. Hildreth.)

with the understanding that it will be offered in evidence.

COURT.—Now you are anticipating, aren't you, the course of your procedure? If you are going to offer that in evidence, you better wait till you do it and then examine about it.

Mr. ATKINS.—It would be proper to offer it in evidence at his time?

COURT.—You may offer it in evidence if you desire. [117] I don't suppose there is any objection to it.

Mr. DIKE.—I have no objection to its being offered in evidence, but I object to examining the witness on it, as not cross-examination. If he wants to make the witness his own, he can call him at the proper time.

COURT.—What do you claim for that patent, Mr. Atkins? What do you claim for the patent that you have before you?

Mr. ATKINS.—I think that it is entirely proper cross-examination. Evidence of certain decisions has been introduced. Well, I am making unnecessary trouble, your Honor. I find this patent is in evidence. In the decision in the Baltimore case, the attempt was made in one case to have the claim four of this Hildreth patent declared to be the broad claim, and the Court then held that claim four of the Hildreth patent was invalid, and the Court of Appeals sustained that holding.

COURT.—I have understood that that suit was upon claim one, and claim one has been sustained.

Mr. DIKE.—Excuse me, your Honor. Perhaps I can make this clear. There were two suits in Baltimore. The first suit was on the Hildreth patent—not on the Dickinson patent. The second suit was on the Dickinson patent.

Mr. ATKINS.—This Hildreth patent being in evidence, it is unnecessary to pursue the course that I intended. But I will call it to your Honor's attention that attempt was made to have the fourth claim of the Hil-

(Testimony of Herbert L. Hildreth.)

dreth patent declared to be the broad claim, which would dominate this art; and when that failed, the attempt was then made to make the Dickinson patent the broad claim which would [118] dominate the art.

COURT.—And the Court held what?

Mr. ATKINS.—That the Hildreth patent covered any method of pulling candy, and it was too broad, and broader than any invention that was made.

COURT.—You mean the Hildreth patent?

Mr. ATKINS.—The Hildreth patent.

COURT.—But the Court did sustain the Dickinson patent?

Mr. LAFFERTY.—As against the particular complainant in that case, because he was estopped; he was in the patent office at the same time, and did not raise his claim—did not present his interference.

Q. Mr. Hildreth, how many sizes of machines do you put out on lease?

COURT.—How does that affect this case, Mr. Atkins? We are simply investigating the patent here. He may have a thousand of those machines out, and he may only have one or two; but how does that affect the case?

Mr. ATKINS.—I don't know that it really affects the case in any way, except that it seemed to be proper to advise the Court upon all the facts that are involved, and to show clearly the disproportionate revenue derived.

COURT.—He has already admitted that he has a number of machines out, and they are out on license.

Mr. ATKINS.—A license of $250 on an average. I wanted to make that clear. But that is really not important. Whatever he can get out of the public, he is entitled to, if he is entitled to monopoly afforded by the patent law. [119] The question here is whether he is entitled to so broad a monopoly as will exclude this particular type of machine.

(Testimony of Herbert L. Hildreth.)

COURT.—Well, that does not explain the question as to whether the monopoly is broad or narrow. It is simply to show that he is using these machines, and that he claims to be the owner of the patent, and that he simply is putting these machines out on license. That does not explain the matter that is here before the Court, which is largely technical, as to whether or not your machine is an infringement of the Dickinson patent.

Mr. ATKINS.—I think, in that view, I might state briefly why I did that. I am not disposed to insist on it, but I don't want the Court to think I am endeavoring to lug in extraneous matter. In the cases decided in the Eastern Circuit, considerable stress was laid upon the fact that this complainant is the first to produce candy-pulling machines in the art, and that, while he was deriving great revenue from it, he was entitled to all that he was getting if he had contributed proportionately to that art. And since the Court in the east had deemed fit to enlarge upon it, I thought perhaps your Honor would like to have the fact brought out here.

COURT.—I do not think it could help this case one way or the other.

Mr. ATKINS.—I am not insisting upon that.

Q. I think you stated, Mr. Hildreth, that you regarded the Dickinson patent as showing the first candy-pulling machine? A. I didn't catch one word there.

(Question read.) [120]

A. Yes.

Q. As showing the first candy-pulling machine. I show you a certified copy of United States letters patent No. 511,011, issued to P. J. G. Firehau, under date of December 19, 1893, and ask you whether you are acquainted with that patent?

Mr. DIKE. I object to that. I don't see how any prior art patent has any bearing on the examination of this witness.

(Testimony of Herbert L. Hildreth.)

COURT.—Is this a prior art patent?

Mr. ATKINS.—It is set up in the answer, if your Honor please.

Mr. DIKE.—Prior art patent set up in the answer.

COURT.—I think you better take that up when you come to your case on the answer.

Mr. ATKINS.—Opportunity ought to be had to examine this witness upon this Firchau patent, for the reason that the application for the Dickinson patent contained claims broader than were allowed in the Dickinson patent, and a claim was rejected by the examiner upon this Firchau patent.

COURT.—I think you better retain that until you come to your defense. We will get these matters mixed up.

Q. Mr. Hildreth, I understood you to say that the Henry patent looks like defendant's machine. Is that correct?

A. Well, I meant as far as pulling two batches at a time.

Q. That was the only resemblance that you intended?

A. Oh, no. Each has three hooks. It pulls candy the same—the same principle.

Q. But this has two fixed hooks and one movable hook?

A. That doesn't make any difference. [121]

Q. As a matter of fact, has that two fixed hooks?

A. As a matter of fact, yes.

Q. The Henry patent—

A. Has two revolving hooks and one fixed hook. It is simply reversed.

Q. Two revolving hooks and one fixed hook?

A. Yes. It is simply reversed.

Q. But there is no movement of a single hook around two fixed hooks in the path of a figure eight, in any type of machine that you have, is there?

A. The motion has the same principle as the other.

Q. But you have no machine in which there are two

(Testimony of Herbert L. Hildreth.)

fixed hooks, a single hook moving around the two fixed hooks in the path of a figure eight?

A. No, I don't know that we have.

Q. Then you do not claim to have any specific patent showing that specific construction? A. Oh, no.

Q. You do not claim that you have? A. No, no.

Excused. [122]

Testimony of G. Ward Kemp, for Plaintiff.

G. WARD KEMP, called as a witness on behalf of complainant, being first duly sworn, testified as follows:

Direct Examination.

(Questions by Mr. DIKE.)

What is your name, age, residence and occupation, Mr. Kemp?

A. G. Ward Kemp. Residence, Seattle, Wash. Age, 50. Occupation, practicing lawyer, Seattle, Wash.

Q. Do you know the defendant, Jim M. Mastoras?

A. I do.

Q. How long have you known him?

A. Since November, 1913. A little over four years.

Q. Acting on behalf of Mr. Hildreth, did you ever lease him a candy-pulling machine? A. I did.

Q. Was there any written lease? A. There was.

Q. Will you produce it? A. Yes.

Mr. ATKINS.—If your Honor please, the written lease is already in evidence.

Mr. DIKE.—Oh, all right. There was a duplicate of it.

COURT.—Have you the lease?

Q. Is that the lease to which you refer? (Handing witness paper.)

A. Yes. It was in duplicate form. This is one of the copies. This is dated November 24, 1913.

Q. At any time subsequently to the execution of that

(Testimony of G. Ward Kemp.)

lease, [123] did you make, on behalf of Mr. Hildreth, another lease? A. I did.

COURT.—I did not understand that lease was in evidence. It was only offered to show the cut.

Mr. ROBBINS.—That was all, your Honor, but we have no objection to the whole lease going in.

COURT.—Very well, let it go in.

Mr. DIKE.—Very well. I will offer it in evidence now.

(Marked Plaintiff's Exhibit 10.)

Q. I asked if there was a second lease—any other lease?

A. Yes, a second lease.

Q. Can you produce one of the duplicate originals of the second lease? If, so, do so.

A. I can. I have it here. Dated July 15, 1914.

Mr. DIKE.—That lease is offered in evidence.

(Marked Plaintiff's Exhibit 11.)

Q. Will you state whether you had any further transaction with the defendant on behalf of the plaintiff?

A. At what time?

Q. After the execution of the second lease?

A. Yes. I had a great deal of correspondence with him trying to get the amount of money he promised to pay on the lease.

Mr. LAFFERTY.—That we object to as being entirely irrelevant and immaterial. This is an equity case—I don't know as it makes much difference.

A. I was stating the transaction, what it was. I was writing to him trying to get the machine back.

Mr. LAFFERTY.—It is an equity case. I guess it [124] doesn't make much difference.

COURT.—Very well.

Q. Was there any other agreement in writing between the defendant Mastoras and the plaintiff, which you had to do with? If so, will you produce it?

(Testimony of G. Ward Kemp.)

A. Yes. In January, 1917—just a year ago to-day—I came to Portland to take the machine away, because he would not send it back after promising many times; and I found that he was operating Mr. Hildreth's machine as shown in this lease, the small form, the No. 1 size, and was planning to build one of his own. And he promised, if I would leave this machine with him about ten days or so, that they would either—he and Papas, where the machine was located, would either pay $200 for the annual lease or else return it. And having ascertained that he was constructing a machine, I left it with him—this old machine—and took this written agreement which I have, signed by him, January 25, 1917, that he would make a new lease and pay according to the terms, or return it within twelve days.

Mr. ATKINS.—If the Court please, I submit that this is entirely irrelevant to a question which your Honor has repeatedly held is the construction of a patent. I do not see how these transactions have anything to do with the construction of the patent, which is the sole issue in this case. I would object to it upon that ground of irrelevancy.

COURT.—This is matter of inducement largely, isn't it?

Mr. DIKE.—Yes.

COURT.—Very well. I will permit it on that ground.

Mr. DIKE.—I offer in evidence the agreement.

(Marked Plaintiff's Exhibit 12.) [125]

Q. Did you ever notify the defendant of the plaintiff's rights under the Dickinson patent?

A. I did. The first time in 1914, when he was getting that second lease, he asked if he could not make the machine himself. I said, "No, you cannot." I said, "Mr. Hildreth has his own patent and the broad Dickinson patent, which involves a lap and draw principle of making taffy, and the only way you can make taffy." I says,

(Testimony of G. Ward Kemp.)

"You cannot make them." I told him of a number that I had shut up of machines in Portland and Seattle. Positively could not do it. Mr. Hildreth had patents that controlled the operation. Again in 1917, when I found he was making the machine, although he denied it at that time, I told him Mr. Hildreth prosecuted everybody—refused to let them operate machines without paying the regular license.

Q. On October 19, 1916, did Mastoras have in his possession, as licensee under the Dickinson patent in suit, a Hildreth candy-pulling machine? A. He did.

Cross-examination.

(Questions by Mr. ROBBINS.)

As I understand, Mr. Kemp, you are an attorney at Seattle? A. Yes, sir.

Q. You specialize in looking after Mr. Hildreth's interests in connection with these candy machines?

A. General practitioner. When anything comes up in regard to Mr. Hildreth's business, if he wants me to attend to it, I attend to it. If I see anything that needs attention, [126] I attend to it.

Q. You are his general representative up there in regard to these matters?

A. In a way, I am. I guess he sends any business to me in that district. But I am simply a general attorney.

Q. What I am getting at, Mr. Kemp, you are the man that looks after his machines out here, and his interests in connection with infringements, and things of that kind?

A. To the best of my ability. He sends an attorney when it is necessary to go after somebody.

Q. Well, I think I understand the situation now. You prepare these leases, and submit them to the lessees, covering these machines?

A. Why, this first lease was prepared in Boston. Mr.

(Testimony of G. Ward Kemp.)

Mastoras didn't know me, and he sent in part of the money to Mr. Hildreth. Mr. Hildreth sent the leases to me, in duplicate form, and I saw that it was signed, and duplicate sent back to him at the time.

Q. When he executed the first lease, he was in Seattle, wasn't he? A. Yes.

Q. He afterwards moved to Portland?

A. Why, he moved all over the country. He had the machine there about two months, and then he sold out to some other fellows, and put in his sale that this machine went with it. They had all kinds of trouble getting it away from the other fellow. Yes, he was in Seattle. And then the second lease was also made there. He came back there after going, I think to San Francisco, [127] he came back, and said it was not his fault about the other fellow holding the machine, and asked to get it again; in fact, wanted to take it to Aberdeen, on the second lease, and he finally brought it to Portland.

Q. But you finally told Mastoras he had no right to build any of these machines; if he did, that Hildreth would prosecute him?

A. Yes, I told him Mr. Hildreth did not allow any one to manufacture machines that involved this Dickinson patent.

Q. You also told him that if he made any kind of a candy machine, he would be prosecuted by Hildreth?

A. I told him this; that the Dickinson machine controlled the lap and draw principle of making taffy, and nobody had ever been able to pull taffy without using the same principle. I told him the different ones that had tried it and been stopped, that he had stopped.

Q. Did you or anybody else ever hear of any way of pullling candy without a lap and draw?

A. I think not. I don't think taffy can be pulled any other way successfully, is my understanding. This ma-

(Testimony of G. Ward Kemp.)

chine has the same principle.

Excused. [128]

Mr. DIKE.—I will now offer in evidence the deposition of Joseph P. Livermore, taken under sections 863 and 864 of the Revised Statutes of the United States. Mr. Livermore is a patent expert.

Sketches with deposition also received.

Mr. DIKE.—I will now offer in evidence certified copy of the file-wrapper and contents of the file-wrapper of the Dickinson patent.

(Marked Plaintiff's Exhibit 13.)

Mr. DIKE.—Some way in getting together my papers in coming out here, I did not bring with me loose copies of the Thibodeau, Jenner, and Henry patents, which were the patents which were in interference with Dickinson in the Patent Office. But I have copies which form part of certified copies of their file-wrappers, and therefore, with the consent of counsel, I am going to offer these copies which are attached to the back of these certified copies, with lease to substitute later on the copies themselves.

COURT.—Very well.

Mr. DIKE.—You have no objection to that?

Mr. ROBBINS.—No, no objection.

(Marked Plaintiff's Exhibits 14, 15, and 16.)

Mr. DIKE.—The Jenner patent was also in suit, as well as the Dickinson patent, in the second suit in Baltimore, [129] and was sustained.

I will also offer in evidence the model of the Dickinson machine, to which I have referred.

(Marked Plaintiff's Exhibit 17.)

Mr. DIKE.—The plaintiff rests.

Recess taken until 2 P. M.

Plaintiff rests. [130]

Portland, Oregon, January 25, 1918,
2 P. M.

Mr. ATKINS.—This machine which is present here in court is the machine which we admit to be the machine complained of, as made and used by the defendant. We desire to offer that in evidence. I assume that it is unnecessary to make any further proof than a tender of that as the machine.

COURT.—I suppose there is no objection to that?

Mr. DIKE.—No objection at all, your Honor.

COURT.—Very well. Let it be admitted.

(Marked Defendant's Exhibit "C.")

Mr. ATKINS.—In the license from Hildreth to Mastoras, the defendant, which has been introduced in evidence, there is a recital that "Whereas Herbert L. Hildreth, of Boston, Massachusetts, hereinafter called the lessor, is the owner of the following named Letters Patent of the United States." The patents therein are described; they are twelve in number, I believe. I desire to offer, under the stipulation, printed copies of those patents in evidence, and to have them identified separately as exhibits in the case.

Mr. DIKE.—I think you better offer them and then I will make my objections.

Mr. ATKINS.—The first patent recited is patent 731,681, dated June 23, 1903. That patent has already been offered in evidence.

COURT.—What is the name?

Mr. ATKINS.—W. E. Henry. That patent has already [131] been offered in evidence, so it is unnecessary to put it in again. The next patent named is 736,313, dated August 11, 1903. Charles Thibodeau. I offer copy of that patent in evidence. That may be included in one of your file-wrappers. Is that so, Mr. Dike?

Mr. DIKE.—No, that is not the one.

COURT.—These patents are prior to the Dickinson patent?

Mr. DIKE.—I object to that patent as irrelevant and immaterial. It refers simply to a method of pulling candy; has nothing to do with the machine, although it shows a picture of the same machine which is the subject of the Thibodeau patent which I offered as part of my case.

COURT.—This precedes the patent that you offered?

Mr. DIKE.—It was held by the Patent Office in the interference that Dickinson preceded the Thibodeau patent. There were two or three different Thibodeau patents of the different machines, and the one that was in interference related to the machine. This one relates to patent on a method, which was the method on which the machine operated. They were made subject of two separate patents.

COURT.—I will let it go in because it might explain something hereafter.

(Marked Defendant's Exhibit "D.")

Mr. ATKINS.—I offer in evidence No. 772,442, dated October 18, 1904, issued to Charles Thibodeau.

Mr. DIKE.—Objected to as irrelevant and immaterial; and if it is offered for the purposes of prior art, as not set up in the answer. [132]

Mr. ATKINS.—It cannot be offered on the prior art, because it is later than the date of the application for the Dickinson patent. It is not offered as evidence of the prior art, but is offered in evidence of the patent properties controlled by the complainant, and the reliance placed upon the licenses which it gives is partly based upon this patent property, including this. This is recited in the license by which he claims to have in the first place bound the defendant to the use of a certain machine. It is part of his composite patent property.

COURT.—I will permit it to be filed.

(Marked Defendant's Exhibit "E."

Mr ATKINS.—If your Honor please, I understand

preparation has been made by which the machine may be operated at this time, and the candy will not abide cooling. I would ask to suspend this introduction of testimony at this point for the purpose of showing the practical operation of the machine.

COURT.—Very well.

Mr. LAFFERTY.—If the Court please, for the defendant, I offer to place a batch of candy on this exhibit of the defendant, Exhibit "C," so that the Court may witness the operation of the machine, and especiallyy in regard to the figure that the candy makes when in actual operation. The Court will observe that this batch of candy that has been put on is still hot. Bringing the candy over from the candy store, it is difficult to get it just at the temperture it should be in the actual, practical operation in the store.

Mr. ATKINS.—It seems to require manual assistance [133] now and then. That is not at all necessary practically.

Mr. LAFFERTY.—Now, we will ask the Court also to observe that, on the opposite side of the machine, are three identical hooks so that two batches of candy may be worked at the same time on this machine. That is what is meant by counsel on the other side and one of the witnesses saying that this was in that respect similar to the Henry patent, which worked two batches at one time. But there is no claim of interference, of course, on that ground.

Mr. ATKINS.—Then just one point that I would like to direct the attention of the Court to, and that is the fact that the candy never assumes the form of a figure 8, which appears to be the expression of the Dickinson patent in suit. Now just what that means in the patent in suit, I don't know; I am unable to obtain from the patent. I ask your Honor to notice that in this machine the candy does not assume the form of a figure 8, although the pin

which works the candy does move in the path of a figure 8.

Mr. LAFFERTY.—If the Court please, at the same time we desire, with part of the same candy, to make a demonstration upon this model, plaintiff's exhibit model of the Dickinson patent, to show that it will not pull candy. In this machine the movement is in a continuous direction. This other machine reverses and goes back in exactly the opposite direction. (Counsel demonstrates working of model.)

Mr. DIKE.—If the Court please, may I show the court this? [134]

COURT.—Yes.

Mr. DIKE.—I don't know whether this is the right amount or not (referring to candy material), but perhaps it will illustrate what I want to show. You see that is making now the V-shaped hank which the witness referred to in the testimony; one end starting here, the other going from here to here. Now the reversing is going to take place, and the two strands of candy are lapped together. Now it is being converted into the V-shaped strand again. (Counsel illustrates operation.) Now, I want this to go through one more operation, for the sake of showing the relation of the pins. It makes no difference which is stationary. The lapping is now taking place. Now, this pin is going to pass between those two. (Illustrates on model.) Now (referring to machine Exhibit "C), I want to point out the fact that this pin is between those two. Now, this pin is between those two. This pin is about to pass between those two. Now this pin has just passed between those two. Each time making that V-shaped strand. I want to call attention to the peculiar V-shape which is identical with that you have seen in the Dickinson machine. There is the V-shape here again. That illustrates it very well just in that position, as showing how the lapping takes place.

COURT.—Very well; I think I understand that.

Mr. LAFFERTY.—Well now, if the Court please, that one pin passes between two others is admitted, but that the mechanical operation where by that is accomplished is [135] upon an entirely different principle is the contention of the defendant in this case; and that one machine is a successful machine, and the other is not, is another contention.

Mr. ATKINS.—Shall I proceed, your Honor?

COURT.—Yes.

Mr. ATKINS.—The next patent in the list is No. 779,-141, dated January 3, 1905, to Charles Thibodeau.

Same objection.

(Marked Defendant's Exhibit "F.")

Mr. ATKINS.—The next patent on the list is No. 781,-853, dated February 7, 1905, to Charles Thibodeau.

Same objection.

(Marked Defendant's Exhibit "G.")

Mr. ATKINS.—The next patent of the list is No. 804,-726, dated November 14, 1905, to Edward J. Jenner. That is already offered in evidence, and it is not necessary to offer it at this time. The next patent on the list is No. 831,501, dated September 18, 1906. That I understand to be Igou patent.

Mr. HILDRETH.—I cannot tell.

Mr. ATKINS.—It appears that I am not provided with a copy of that patent, through some inadvertence. It was ordered, and we should be glad to introduce that copy later on, if it be acceptable.

COURT.—That is already in, isn't it?

Mr. ATKINS.—I think not. The Igou patent has been spoken of. [136]

Mr. DIKE.—I don't think it has been offered.

COURT.—Very well. Let it go in.

Mr. ROBBINS.—We may substitute it later, your Honor?

COURT.—Yes.

Mr. DIKE.—I object to this offer, but do not object to the fact that it is not produced at the present moment.

COURT.—Very well.

Mr. ATKINS.—The next is No. 832,384, dated October 2, 1906, to Herbert L. Hildreth. This patent has been offered, I believe.

Mr. DIKE.—Yes.

Mr. ATKINS.—This patent has been offered and identified by complainants themselves. The next of the list is No. 857,770, dated June 25, 1907, to Charles Thibodeau.

Mr. DIKE.—Same objection.

COURT.—Very well; the objection will be overruled.

Mr. ATKINS.—That not being in evidence, I will offer it.

(Marked Defendant's Exhibit "H.")

Mr. ATKINS.—The next of the list is No. 859,788, dated July 9, 1907, to Charles Thibodeau. I offer it in evidence.

Mr. DIKE.—Same objection.

Objection overruled.

(Marked Defendant's Exhibit "I.")

Mr. ATKINS.—The last of the list is No. 881,442, dated March 10, 1908, issued to complainant as assignee of Robinson & Deiter.

Mr. DIKE.—Same objection. Objection overruled.

(Marked Defendant's Exhibit "J.") [137]

Testimony of G. H. Williams, for Defendant.

G. H. WILLIAMS, a witness called on behalf of the defendant, being first duly sworn, testified as follows:

Direct Examination.

(Questions by Mr. ATKINS.)

State your age and residence, Mr. Williams.

A. Age 38 years; residence, Portland, Oregon.

(Testimony of G. H. Williams.)

Q. What is your occupation?

A. My occupation is professor of machinery.

Q. Where?

A. Benson Polytechnic School, Portland, Oregon.

Q. You may state, if you please, what experience you have had in the science and art relating to mechanics generally.

A. Graduate of Case and of Belt Machinery for twelve years. Eight years, the last eight years as professor of machinery at Benson Polytechnic School, Portland, Oregon.

Q. In what capacity did you work, and for whom, in the building of machinery?

A. Why, I was with the Brown Hoist Engineering Co., builders of conveying machinery and engines; with the Norton Tool Co., manufacturer of tools—held the position there of master mechanic; master mechanic with the Harrison Automobile Co., Grand Rapids, Michigan; master mechanic with Maxwell-Briscoe Co., Newcastle, Indiana.

Q. Where did you serve your apprenticeship as a master mechanic?

A. Yes. Brown Hoist Engineering Co.

Q. And during what period of time? [138]

A. I was with the Brown Hoist people eight years.

Q. In your statement above made, you said that you were a graduate of Case. Will you please explain what that term means?

A. Technical graduate. In order to get the master mechanic degree from the Brown Hoist Engineering Co., I have to have a technical course in some standard school. During my training with the Brown Hoist Engineering Co. I attended the Case school in order to obtain the grade of master mechanic, while working for the Brown Hoist Engineering Co.

(Testimony of G. H. Williams.)

Q. The Case, then, is a technical school?

A. A technical school.

Q. Located where? A. Cleveland, Ohio.

Q. What is the total length of your experience in mechanical employment?

A. Twenty years total experience in employment.

Q. Have you been constantly engaged in it during that time?

A. Constantly engaged in it during that time; three years in apprenticeship.

Q. I hand you Plaintiff's Exhibit 13, and refer to the copy of the patent 831,501 to H. M. Dickinson, which is the patent in suit, and ask you to state whether you have examined that patent and whether you understand it.

Mr. DIKE.—Are you presenting this man as an expert?

Mr. ATKINS.—Yes.

Mr. DIKE.—I object. So far as anything is shown, this witness is not qualified as a patent expert. He has shown simply that he has had mechanical training, but [139] nothing of his experience which would lead him to the performing of duties of patent expert in explaining specifications or drawings of patents.

Mr. ATKINS.—Perhaps it will be well to understand what a patent expert is from the point of view of counsel for complainant. I am offering him as an expert witness skilled in the mechanical art.

(Examination by the COURT.)

Q. Have you had anything to do with patents?

A. Well, I have drawn several patents myself. I have appeared in court on a couple of patents.

Q. What is that?

A. I have appeared in court on two patents.

Q. As an expert? A. No; for myself.

Q. But generally, you have not had any expert ex-

(Testimony of G. H. Williams.)

perience concerning procuring of patents and the drawing of the plans and specifications?

A. Drawing up the papers?

Q. Yes.

A. No; not drawing up the papers. I never drew up any papers.

Q. Did you ever draw up any of the plans?

A. Yes, I have made drawings.

Q. You have made drawings? A. Yes.

Q. You can do that, can you? A. Yes.

COURT.—I doubt his qualification.

Mr. LAFFERTY.—If the Court please, we are offering [140] this witness as an expert mechanic, to testify to the one principal point: Are these two machines built on the same mechanical principle? That is the big question we are to ask this witness, and we think he is qualified as an expert mechanic. Your Honor is not bound to take his testimony any more than your Honor is bound to take Mr. Livermore's opinion or testimony. But he can testify to that point, as to whether they are built on the same mechanical principle. And under the patent law, that is decisive of the case. If one man has adopted the mechanical principle of another's patent at a subsequent date, he is an infringer, even though the Patent Office did not discover it and granted the subsequent inventor, or alleged inventor, letters patent.

COURT.—The trouble of giving testimony of this kind is, it will lead to a long list of witnesses of the same nature, that possibly would not aid the Court very much.

Mr. LAFFERTY.—Well, we have no long list of witnesses ourselves, and I think the testimony of the other side is in.

COURT.—I am going to allow this evidence, but not as a precedent for allowing very much testimony on that line.

(Testimony of G. H. Williams.)

Q. (Question read.)

A. I have looked at the drawing of the patent at issue, and I have noticed the model and the working operation of the model.

Q. What do you understand to be the movements of the pins F and F' shown in the drawing of the patent? [141]

A. Those pins move along a broken line—plane broken line. They are reversed by a lever and move on a backward stroke on the same process as they were moved forward on a broken line. They are a plane movement; in other words, a plane movement.

Q. Will you describe the manner of operation of those pins in moving from one end of the trough to the other and back again to the point of departure?

COURT.—I think that has been demonstrated. The Court is already in possession of the manner of the movement of those pins, as far as that is concerned. If you want to get an opinion out of this witness, you may do so.

Mr. ATKINS.—We can hardly get at the point we want to get at, if your Honor please, without asking some questions that lay the foundation for a further question. I suppose I could very readily state to your Honor what we want to show, but I don't think that would be a proper thing to state in the presence of the witness. We are relying upon his testimony to describe this operation of the machine. Of course, this demonstration that is made here will not appear before the Court of Appeals if this case should go to the Court of Appeals or any other court, and the record should afford a complete showing itself of the operation of the machine.

COURT.—Well, I think by taking hold of the patent itself and following out the specifications, the operation of the machine is very readily ascertained and very readily understandable.

Mr. ATKINS.—Of course it is for the Court to pass

(Testimony of G. H. Williams.)

[142] upon those questions, and the testimony of an expert is available only as the Court may desire, to assist in passing upon questions that sort. But the testimony of the expert for the complainant has been offered upon no showing of a practical knowledge of the art. It is a theory, built upon the paper patent, and all that we want to have appear here is that there are certain operations in this machine which militate against its practical success.

COURT.—Well, you can go on and show that, if you desire, but I do not think it will enlighten the Court much, from what knowledge the Court has already. You may proceed.

(Question read.)

A. Well, those pins are moved along by an arm located over the top of the trough. The arm is held, or I should say moved by another arm, vertical arm, which is attached to a nut; the nut being connected with a screw.

Q. May I suggest that it would be well to identify those members by the reference letters that appear in the patent, so that there will be no question as to what you are referring to.

A. Well, do you want me to specify?

Q. When you refer to a nut, if you will just indicate it by the numeral that belongs to it.

A. By the letter that belongs.

Q. I believe it is "C," referring to the patent drawing.

A. You want to know how these pins are moved back and forth along the trough, now, with this machine as it is specified here. The pins are held by a lever E, which is attached [143] to bar—there is no letter—E. The bar is supported by two arms T, one on each side. This arm is attached to a nut C, which works on screw H; this screw reversing clock-wise—not clock-wise—will move the pins back and forward up and down the trough.

Mr. ROBBINS.—If the Court please, I would like to

(Testimony of G. H. Williams.)

ask the witness a couple of questions.

COURT.—Very well.

(Examination by Mr. ROBBINS.)

Q. Mr. Williams, in your duty as an expert, is part of your duty the observation of machinery? A. Yes.

Q. You have observed and are familiar with the movements of machinery? A. Yes.

Q. Have you observed the movements of these two models to-day? A. Yes.

Q. I wish you would describe what this movement is in the Dickinson patent, from a mechanical standpoint. What do you call it? A. It is an intermittent motion.

Q. Would you also call it an in-and-out motion?

A. No.

Q. What is the technical term that you would apply to that as a mechanic?

A. I would call that a reverse motion.

Q. You would call that a reverse motion? A. Yes.

Q. Just make it a little plainer what you mean by reverse motion? [144]

A. Reverse motion is an object traveling along a plane line forward and back.

Q. When you say plane, you mean p-l-a-n-e?

A. Yes.

Q. You would describe this motion, then, from a mechanical standpoint, as an intermittent movement?

A. Yes, sir.

Q. Moving along a plane? A. Yes.

Q. Having a reverse motion? A. Yes, sir.

Q. Now, then, will you kindly observe the exhibit here of Mastoras, also, and state whether or not you have observed the movement of that center pin?

A. Yes, I observed the movement of that.

Q. You saw that machine in motion, did you?

A. Yes.

(Testimony of G. H. Williams.)

Q. What do you call that movement from a mechanical standpoint?

A. I would call that a cylindrical movement.

Q. Now, explain to the Court the distinction between a cylindrical movement and an intermittent movement.

A. Plane movement?

Q. Yes.

A. Cylindrical movement is an object that goes around in a circle, continuous circle.

Q. In other words, a cylindrical movement means exactly what this does: It is going right around in two circles? A. Yes.

Q. Well, now, speaking from a mechanical standpoint, is there any similarity between those two movements? [145]

A. No, there is not.

Q. Is there, as a matter of fact, from a mechanical standpoint, any mechanical similarity between these machines?

A. No, I cannot see that there is any mechanical similarity there.

Q. Well, do you see any at all? A. No.

Q. I will ask you, Mr. Williams, if, as a mechanic, you have been able to discover any movement describing a figure eight in the Dickinson patent?

A. No, I could not see where there is movement there that would make a figure eight.

Q. And have you examined this machine with a view of determining whether or not it does describe a figure eight?

A. When I saw it in operation there, I did.

Q. And your testimony is that it does not describe a figure eight? A. No, it does not.

Q. I will ask you if Mastoras' machine describes a figure eight—the center pin?

(Testimony of G. H. Williams.)

A. The moving pin does.

Cross-examination.

(Questions by Mr. DIKE.)

Mr. Williams, you have seen the operation of those two machines? A. Yes.

Q. You agree, don't you, that in the Dickinson machine each pin passes between the other two pins, and then is in turn a pin which passes between the other two?

A. Well, now, that proposition is difficult in my viewpoint. [146] If you will let me state my viewpoint, my viewpoint is this: That on that patent there, or on the model rather, two pins pass a stationary pin; whereas on this model, a moving pin passes two stationary pins.

Q. I didn't ask you to compare the two machines. I don't want you to compare the two machines.

A. Beg pardon.

Q. I am simply asking you that question. Isn't it a fact that one pin first passes between the other two, and then is one of a pair between which another pin passes; referring to the Dickinson machine.

A. Well, those two pins pass one pin; that is, they pass one pin—stationary pin.

Q. And isn't it true that after that happens one of the other pins then passes between the other two? Take the machine and look a it.

A. Let me see it.

Q. Be clear in your mind about it. I don't want you to misunderstand anything.

A. Will you state your question again?

Q. Isn't it true that one pin first passes between the other two, and then one of the other pins passes between the two remaining pins?

A. Yes, that is a fact.

Q. And that is a part of the cycle of operation of that machine? A. That is a part of the operation.

(Testimony of G. H. Williams.)

Q. Now, isn't it also true that each one of those three [147] pins is in turn the pin which passes between the other two? You will note that I say "in turn."

A. No, these two pins here pass this pin, and in turn this passes between this pin and this pin. This pin is always stationary. These two pins are the only pins that really pass.

Q. Isn't it also true that the stationary pin goes in on one side of a pair of pins and comes out on the other?

A. No. The stationary pin passes between these two pins. Now, when these pins are reversed, see, when these two pins are reversed, they pass the stationary pin.

Q. Now, referring to Mastoras' machine, defendant's machine, isn't it also true that this pin which moves first passes between the two stationary pins, and then one of the stationary pins passes between the moving pin and the other stationary pin?

A. The moving pin passes between the stationary pins, and then passes around one stationary pin. But that one stationary pin does not move between the two pins; it is stationary. That movable pin passes between the two stationary pins and around one stationary pin.

Q. You saw that pin, the moving pin, pass between the two stationary pins, didn't you?

A. It passed between the two stationary pins.

Q. Now, will you watch the left-hand stationary pin, and see whether it passes between the moving pin and the other pin?

A. The stationary pin remains stationary.

Q. No, but hasn't it passed between the other two pins, [148] even though it has remained stationary?

A. It has passed between the two, but it remained stationary. That is, the movable pin passed around the stationary pin. The stationary pin did not do any moving.

(Testimony of G. H. Williams.)

Q. But it went between—even though it didn't move—between the stationary pin and the other moving pin?

A. Because of the fact that—

Q. Answer my question, yes or no, before you explain.

Mr. LAFFERTY.—I submit that your Honor understands that thoroughly, and one man skilled in language is trying to put his language against the other man's mechanics.

COURT.—This man is here as an expert.

A. No, I wouldn't say that it passed between those two pins.

Q. What is the mechanical difference? Is there any?

A. I would say that the movable pin passed around the stationary pin.

Q. Did you ever hitch up a team of horses?

A. I have when I was a boy.

Q. Well, does it make any difference whether you back your horse into the shafts or pull the wagon up to the horse?

A. Well, if I pulled the wagon up to the horse, I wouldn't be pulling the horse between the shafts.

Q. But you would get the horse between the shafts either way?

Mr. LAFFERTY.—You might pull candy to two different ways, too. It wouldn't be by the same process.

COURT.—You may answer the question.

A. The horse evidently gets between the shafts.

Mr. DIKE.—All right. That is all, your Honor. [149]

Redirect Examination.

(Questions by Mr. LAFFERTY.)

As a mechanical proposition, Mr. Williams, would it be possible for a strand of candy to be pulled by pins without one pin passing between two other pins or a plurality of other pins?

(Testimony of G. H. Williams.)

A. Well, now, I am no candy expert. I don't know enough about candy to answer that question.

Q. But I am not asking you about candy, but as a mechanical proposition. I will ask you this question: If two pins oppositely disposed were moving in the same or opposite directions, that would not pull candy, would it?

A. I don't see how it could.

Q. Or if three pins, or a plurality greater than two, were moving in the same direction, there would be no pulling or lapping of candy?

A. There would be no lapping or pulling.

Q. Therefore, there must be one pin going opposite the other two at some period of the game, or at some time of the process?

A. Yes, there must be opposite movement.

Q. But if these pins are so propelled by different mechanical processes, they are different machines? Is that true or not?

A. I don't understand your question.

Mr. DIKE.—I object to that.

Q. Would two machines that brought about the pulling of candy on pins, which propelled the pins in different ways, even though the pins in each case moved, or moved in such [150] a way that one went through between the other two, as in this case, where one is a plane movement, with reverse stroke, and the other a cylinderical movement in the figure eight,—are those two machines similar upon mechanical principle, or are they different?

A. Well, the mechanical operation of those machines may be different. The mechanical operating of those pins can be different.

Q. And yet effect the same end?

A. And effect the same end.

Excused. [151]

Testimony of Henry Ross, for Defendant.

HENRY ROSS, called as a witness on behalf of the defendant, being first duly sworn, testified as follows:

Direct Examination.

(Questions by Mr. ATKINS.)

What is your age, Mr. Ross?

A. Sixty-four.

Q. Your residence?

A. 1163 Laurelhurst Avenue, Portland.

Q. What is your occupation?

A. Manufacturer of candy.

Q. Please state what acquaintance you have had with the practical manufacture of candy?

A. Oh, I have been at it since 1872.

Q. Practical candy-maker during that time?

A. Yes, sir.

Q. Please state whether, during any portion of that period, you have worked for candy-making concerns, and if so, what ones?

A. I have worked for sixteen years for one man in Chicago; eleven years for the Pacific Coast Biscuit Co.; one year for the National Biscuit Co.; then Greenfield & Strauss, and A. Slauson & Co., New York,—the last in New York.

Q. What practical experience have you had in the city of Portland?

A. Well, the Pacific Coast Biscuit Co. I made all their goods as superintendent there for eleven years, I believe—ten or eleven years—till I got my legs and feet cut off.

Q. What position did you hold with the Pacific Coast Biscuit [152] Company?

A. Superintendent of the factory.

Q. During what period were you superintendent?

(Testimony of Henry Ross.)

A. From 1900 to 1911.

Q. You are now engaged in the manufacture of candy on your own account?

A. With my sons.

Q. You have seen that machine, defendant's machine, and this model in operation here, have you?

A. Yes, sir.

Q. Please state whether you consider the operation of pulling candy as performed on this model exhibit and as performed on defendant's machine as the same in any particular?

Mr. DIKE.—I object to that. This witness may be expert as far as candy is concerned, but he is not an expert so far as mechanical movements are concerned, and therefore he is not qualified, it seems to me, to answer the question.

Q. In your connection as superintendent of the Pacific Coast Biscuit Co., did you have anything to do with candy machinery? A. Yes, sir.

Q. Were you acquainted and familiar with the operation of candy machinery? A. Yes, sir, always.

Q. Do you consider yourself, in consequence of that experience, acquainted with the operation, sufficiently acquainted with machinery, to understand the operation of these two machines?

A. This one I do. We had one like that; not like that, but something similar. But that one I have never seen until I came here.

Q. You understand how that works? [153]

A. I have seen how it works. Yes, I have seen how it works.

Q. You saw the operation of that machine? A. Yes.

Q. Did you understand, from that operation, that there is a lapping of the candy such as is necessary for the pulling of candy in hand-pulling?

(Testimony of Henry Ross.)

A. Not for hard candy.

Q. What?

A. Not for hard candy, what is cooked over 275 or so, I should judge—275 degrees Fahrenheit—it would not work it.

Q. Then if I understand you, that will work in the manufacture of certain kind of candy?

A. Oh, it would be for cream-making, something like that.

Q. Do you mean it would stir candy? A. Yes.

Q. But in your judgment, in view of your experience in candy manufacture, do you consider that a machine like that will pull candy? A. No.

Q. Will you explain why?

A. It don't let air enough in it. It hasn't got the motions to it. It lays flat on the floor there, on the bottom of the trough, and it certainly don't get the air around. In any of the pulling-machines, as it is in existence now, the air is from all sides. It absorbs the air, knocking it around, but this one don't.

Q. What machine did you use in the Pacific Coast Biscuit Co.?

A. We made it ourselves here. The superintendent of Frisco [154] came up here, and he made pullers here, and got it cast here. We put them together over at our factory.

Q. What sort of machine? Was that machine operated under the Hildreth license?

A. No. There ain't no license on that.

Q. They had no license that you know of?

A. They patented it themselves, as far as I understood.

Q. You have seen that machine in making candy here in the courtroom? A. Yes, I have seen it.

Q. I mean defendant's machine? A. Yes.

Q. Why, according to your understanding, is the candy

(Testimony of Henry Ross.)

supported and kept in continuous motion in the defendant's machine, and demands a support in the complainant's machine as shown in the model?

COURT.—Are you calling this man as an expert now on the mechanical operation of these machines?

Mr. ATKINS.—No, on candy manufacture; candy-maker—expert candy-maker.

COURT.—I don't think he is helping the Court a particle.

Mr. ATKINS.—You don't.

COURT.—No, I don't think so.

Mr. ATKINS.—I don't want to burden the Court, I am sure.

COURT.—This man is not an expert on the mechanical operation of a machine. If you want to inquire of him about the texture of the candy, and how it is produced, and the heat required, etc., if you think it is at all material [155] to this case, you can inquire into that. I don't see that that is very material.

Q. What are the ingredients ordinarily used in the making of candy for pulling purposes?

A. Sugar, and some use cream of tartar some use glucose—any acid to cut the sugar.

Q. That is in making pulling candy? A. Yes.

Q. What is the temperature to which that mixture must be raised in order to be pulled?

A. Not less than 255 or 260 to 330 degrees.

Q. At what temperature would that mixture boil?

A. Oh, water boils at 212. It would be about 212.

Q. It would boil at 212?

A. I don't hardly think it will. It is too heavy.

Q. If a mixture of candy ingredients were raised to the boiling point, but not raised say to 260 degrees, would it make a pullable compound?

Mr. DIKE.—I object, your Honor. I cannot see why

(Testimony of Henry Ross.)

this in any way affects the mechanical question which is raised by this case.

COURT.—The only reason I am allowing this is that your principal witness for the plaintiff went into that very thoroughly.

Mr. DIKE.—It was only on his cross-examination he went into it I might suggest. I asked him to enter into explanation to begin with simply so that you Honor would have a general idea of the process of making pulled candy; not because it was material to the case, but simply because it would make the use of the machine more clear. [156] All the other examination was on cross.

COURT.—Well, I didn't know,—I am not acquainted with the process—I didn't know but what there might be some conditions when candy would pull better than under others, and the machines would operate better and in a different way. That is the only reason that I am allowing this at all.

Mr. DIKE.—I don't object to it, except it seems to me it is absolutely irrelevant. If counsel would point out any relevancy, I would not object to it.

Mr. ATKINS.—It is relevant in this sense, your Honor, that we admit the validity of the Dickinson patent within certain limitations, but we deny that it is applicable to the art of pulling candy, to pull candy as defendant's machine will pull it; that defendant's machine belongs to one branch of the art of pulling candy, and, so far as it is operative and so far as the patent is valid, the Dickinson machine belongs to another department of the candy-making art, and is necessarily limited to that department; that Dickinson never made an advance in the art of pulling candy that would have suggested the pulling that is now performed by defendant's machine, and performed also by a number of other machines, so far as that is concerned. It is to make clear just what Dickinson invented,

(Testimony of Henry Ross.)

in order that his patent may be restricted in the terms which the Court allows to it to that which he did invent, and that it may not be extended to cover that which he did not invent. There are only a few questions that I desire to ask along that line.

COURT.—Proceed. We will see what the development is. [157]

Q. All candy is not necessarily pullable? A. No.

Q. You can make candy without pulling it?

A. Yes.

Q. You can make candy by stirring it? A. Yes.

Q. Now, in your opinion, would this machine of complainant, shown in the model here, would that pull candy practically? A. No.

Q. Now, why not, if you understand it?

A. It shoves the candy too much, and don't let air enough in it. It moves it, yes, but that is all.

Q. You have seen the operation of that machine?

A. Yes.

Q. Did you find in that operation a lap of one part of the candy upon the other, as is shown in defendant's machine? You have seen them both.

A. Yes. No, there is no lapping there.

Q. There is no lapping?

A. It goes through the one pin. That is all.

Q. Did you notice whether there was a lap of a part of the candy mixture in the operation of this machine?

Mr. DIKE.—Objected to. This is directed, apparently, toward the question of operativeness of this machine. The validity of this patent is admitted, and therefore that admission carries with it the admission of its utility and its operativeness. Now, that being the case, I cannot see how this examination has any bearing whatever.

Mr. LAFFERTY.—The defendant in this case, I beg to call your Honor's consideration, is a poor man; and,

[158] "Poor folks have poor ways" is an old adage. He is trying his first patent case against a gentleman with very able and affable counsel, who has tried many patent cases. If we were to try this case over again, we could try it much better, as your Honor well knows. But we have four counsel employed here. I happen to be the general attorney, or regular attorney for this Greek defendant—he is now an American citizen, but born in Greece—I am his attorney and employed the others. I speak as his personal counsel, and to that extent I desire now to state in the record that the defendant does not admit or concede anything. The plaintiff's patent, his claim one, has been held valid, by another court of concurrent jurisdiction, in one case wherein the defendant was in interference before the Patent Office, and refused to prosecute a claim although he was served with notice, and was held to be estopped, and the patent, claim one, was held to be valid that far as against that particular man who was estopped, and upon that ground alone. Otherwise, the case is obiter or not applicable. We will come to that in the argument. But when counsel assumes that defendant himself admits validity of that patent, we do not, and it will come to this point in the argument. The law is that a patent is not a valid patent until it is reduced to practical commercial operation; that if it won't work, in other words, it is not protected by the law. For that reason Mastoras does not admit any validity in this model, or any machine based upon this model of the complainant in this case.

COURT.—Do you desire to cross-examine?

Mr. DIKE.—No; no cross-examination.

COURT.—Very well. You may stand aside.

Excused. [159]

Mr. ATKINS.—We rest, your Honor.

Mr. DIKE.—I have no further testimony.

COURT.—Very well; you may proceed with the argument of the case.

Mr. DIKE.—I think I have overlooked introducing these three leaflets, which should have been introduced as part of my case. If there is no objection, I will introduce them now.

Mr. ATKINS.—They were referred to in argument and it was evidently an oversight.

COURT.—Very well; let them be introduced.

(Marked Plaintiff's Exhibits 18, 19, 20.)

Mr. ATKINS.—I think the Firchau patent was offered in evidence.

Mr. DIKE.—It was not offered as prior art, was it?

Mr. ATKINS.—My impression was that it was in. I certainly desire to have the Firchau patent in. It was referred to, and is referred to in the Wrapper and File Contents of the patent.

(Received without objection and marked Defendant's Exhibit "K.")

Defendant rests.

Plaintiff rests.

Filed February 28, 1918. G. H. Marsh, Clerk. [160]

Plaintiff's Exhibit No. 1.

UNITED STATES OF AMERICA.
Department of the Interior.
United States Patent Office.

To All to Whom These Presents Shall Come, GREETING:

THIS IS TO CERTIFY that the annexed is a true copy from the records of this office of the Decision of the Examiner of Interferences dated May 25, 1905, in the matter of

Interference Number 21,523

JENNER.

vs.

DICKINSON

vs.

THIBODEAU.

Subject Matter: Candy-pulling Machine.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the city of Washington, this 9th day of October, in the year of our Lord one thousand nine hundred and thirteen and of the Independence of the United States of America the one hundred and thirty-eighth.

[Seal] R. T. FRAZIER,
Acting Commissioner of Patents. [161]

Paper No. 118.
Recorded Vol. 74, page 33.

K. V. D. No. 21,523. B.

UNITED STATES PATENT OFFICE.

Jenner v. Robinson & Deiter v. Dickinson v. Thibodeau v. Hildreth.

Candy-pulling Machine.

Application of E. J. Jenner filed November 13, 1902, No. 131,156.

Application of Robinson & Deiter filed July 12, 1902, No. 115,252.

Application of H. M. Dickinson filed November 5, 1901, No. 81,277.

Application of Chas. Thibodeau filed November 26, 1900, No. 37,734.

Application of H. L. Hildreth filed September 21, 1900, No. 30,703.

The issue of this interference is as follows:

A candy-pulling machine comprising a plurality of oppositely disposed candy hooks or supports, a candy-puller, and means for producing a specified

relative in and out motion of these parts for the purpose specified.

The dates alleged by the respective parties in their preliminary statements are as follows:

	Jenner.	Dickinson.
Conception	January 15, 1896	September 15, 1895
Disclosure	February 1, 1898	September 15, 1895
Drawing	February 1, 1898	September 15, 1895
Model		November 1, 1897
Reduction to Practice	February 1, 1899	January 29, 1900

	Thibodeau	Hildreth
Conception	May 1, 1900	July 1894
Disclosure	May 1, 1900	August 1, 1894
Drawing	May 1, 1900	December 26, 1897
Model	May 1, 1900	December 26, 1897
Reduction to Practice	June 11, 1900	June 11, 1900

[162]

Prior to 1900 the pulling of candy was done by hand in the common, well-known manner. The issue of this interference relates to a pioneer invention, as embodied in the earliest machines constructed for performing this pulling operation by mechanical means. The issue is of a generic nature, broad enough to include the widely different types of machines shown in the several applications.

Dickinson's advertisement of his candy-pulling machine appeared in the "Confectioners' Journal," in January, 1900. Hildreth ordered a machine, tested it, and rejected it as unsatisfactory. One of Hildredth's workmen, Thibodeau, shortly thereafter made a machine which was satisfactory to Hildreth. This machine as thus constructed formed the basis of Hildredth's application filed September 21, 1900, which was allowed October 20, 1900. Thibodeau filed his first application

on November 26, 1900, whereupon Hildredth's application was withdrawn from issue and an interference declared between the two applications.

Thibodeau claiming that his device was merely an improvement of Dickinson's, his assignee acquired Dickinson's interests and caused him to file an application on November 21, 1901. Subsequently on July 12, 1902, Robinson and Deiter filed their application.

Jenner was a subscriber to the "Confectioners' Journal," and seeing Hildredth's advertisement in the February, 1902, number, he enclosed a cut thereof to his attorney (Jenner Record, p. 6, Q. 28, p. 136, XQ. 810) in March, 1902, together with a sketch of his own invention. This sketch has not been put in evidence, but Jenner alleges that it showed the construction of his No. 3 machine built in November, 1899. (XQ. 125, 409–410). [163]

On May 24, 1902, Jenner wrote to Hildreth offering his invention for sale (Jenner Exhibit No. 1), and later on June 8, 1902, in response to a letter from Hildreth (Jenner Exhibit No. 2), sent him a sketch and print of his candy-pulling machine. Said sketch and print are put in evidence by Dickinson (Jenner Record, p. 99, XQ. 594; p. 68, XQ. 433). The blue-print he alleges shows his second machine, built and tested in September 1899 (XQ. 94, 100, 431).

In his reply to this letter, Hildreth said: "If your machine was built before January, 1900, and if you can prove this by evidence satisfactory to me, I should be willing to take up the matter with you at once." (Jenner's Exhibit No. 4). Jenner in his reply having failed to state when his machine was built (Dickinson's Exhibit No. 7), Hildreth again wrote on July 24, 1902, insisting on the required data (Dickinson's Exhibit No. 8). The correspondence intervening between July 24 and September 28, although then in their possession, Jenner and Hildreth refuse to produce upon the ground

that it contains private matter (XQ. 503; Hildreth Record, p. 68, XQ. 275). In the letter in reply to Hildreth's letter of June 25, Jenner says he complied with Hildreth's requirements as to dates when the machine was built (XQ. 504–505). This letter is of the utmost importance as containing Jenner's first statement of what he claimed regarding his invention. The refusal to produce it is most suspicious, especially as from Jenner's own statement it does not appear that it contained the private matter alleged as an excuse for its non-production (XQ. 503, 564–566). Later, during the taking of Hildreth's testimony counsel for Dickinson gave notice that he expected to apply to the Court for an order directing Hildreth to produce this letter and other affidavits and statements (Hildreth Record, p. 79). Thereupon Hildreth's counsel stated that he was unable to produce the letter and affidavits owing to the fact that they had become lost (Hildreth Record, p. 91). This refusal to put in evidence [164] important documents is not calculated to convey a favorable impression of the testimony of Jenner and his witnesses or to entitle said testimony to any great weight.

In his letter of September 24, 1902 (Dickinson's Exhibit No. 10) Jenner gives the data of his invention substantially as in his preliminary statement.

Jenner's interests having been purchased by Hildreth, his application was filed on November 13, 1902. The circumstances under which Jenner was introduced into this interference warrant the closest scrutiny of his record.

In his preliminary statement Jenner alleges that he first made drawings of his invention on or about February 1, 1898. He puts in evidence "Jenner's Exhibit Sketch No. 1," which he alleges he made and dated on July 5, 1897 (XQ. 127–129). According to his own statement Jenner knew at the time he swore to his preliminary

statement that the date of the drawing was incorrectly given (Q. 35; XQ. 131).

In the letter of September 24, 1902, giving a history of his invention no mention is made of this dated sketch. No explanation is given why if the sketch was in the possession of Hildreth, as alleged, his attorney should neglect to give that date as the date of the first drawing. The various acts of Jenner relating to this invention and the importance of establishing early dates has apparently been carefully gone over between Jenner and Hildreth and it is not easily understood how so important a date could have been forgotten in the short time elapsing between its alleged delivery to Hildreth and the preparation of his preliminary statement. This sketch shows substantially the same machine as the drawings of Jenner's application. Jenner testifies that prior to the building of his first machine he showed the sketch to his wife, then Miss Lizzie Blind (Q. 363). She owing [165] to illness is not called as a witness (Jenner Record, p. 221). He further says that he showed the sketch to his brother, Robert Jenner, and to Oppliger on or about February 1, 1898 (Q. 36, 46, 48) at the time he first disclosed the invention to them. Later he gives the date of disclosure to Robert Jenner as about March 15, 1898, and again as during March or April, 1898 (XQ. 647). He fixes the date as the time when his brother was visiting him to train a horse which had caused an accident on Palm Sunday, 1898 (XQ. 647–650).

Robert Jenner testifies that several sketches, one more complete than the others, were shown him by his brother in the spring of 1898 (Q. 3, 14), though Edward Jenner testifies only as to "Sketch No. 1." He does not state what these drawings were other than that they were sketches of the machine in controversy. He fixes the date as in the spring of 1898, a time during which he visited his brother almost every Sunday afternoon

(Q. 3). It appears, however, that such visits to his brother have been more or less regular since 1895.

Oppliger, an employee of Jenner, identifies Exhibit Sketch No. 1 as a drawing shown to him in February, 1898 (Q. 9). On cross-examination he states the time as March, 1898 (XQ. 67). He apparently relies merely upon his memory to fix the date, the unreliability of which is shown by the fact that he testifies to having seen Dickinson's Exhibit No. 13 in April, 1898, or at least shortly after seeing Sketch No. 1 (XQ. 191–195), whereas Jenner testifies when shown said sketch that it was not made till 1902 (XQ. 110, 116, 117).

Jenner testifies that he constructed and successfully operated a candy-pulling machine in February, 1899 (Q. 2–6). This machine is put in evidence and also appears in Exhibit Photograph No. 1, and is the machine shown in the drawings of [166] Jenner's application. He alleges that Oppliger and Stauss helped to construct the machine, the former assisting in constructing the framework and mounting the pulling members (Q. 20). Stauss he says bent the pulling members and drilled the holes for the gear (Q. 19). The operation of the machine at the time of its first construction, he alleges, was witnessed by his wife and Oppliger (Q. 21), and Stauss, Lindenborn and White subsequently saw the machine and its mode of operation (Q. 22).

Jenner testifies that after operating this first machine several times (XQ. 95), he built a second machine about the first of September, 1899, using portions of the first machine (XQ. 94–98), and that this second machine also operated successfully (XQ. 100). It was this No. 2 machine which was first introduced to Hildreth's attention (XQ. 112–113). About November 10, 1899, the machine was dismantled and changed back to the original form, except that the pulling members were made to revolve in opposite directions by the addition of another

ratchet wheel (XQ. 101–103), as shown in Exhibit Photographs Nos. 2 and 4.

Jenner fixes the date of building his first machine by a trip which he took to St. Louis on April 15, 1899, alleging that he built the candy-pulling machine within a month or a month and a half before he left for St. Louis (XQ. 633). As to the object of this trip he testifies:

> "Cross-Int. 215. What was the purpose of that trip, and what did you do upon your trip?
>
> "Ans. The purpose of that trip was to go to St. Louis and try to get some of the wholesale candy manufacturers to take hold of said machine, build and perfect it, and I also had in view at that time, in case I should be successful with my stick-candy machine, I would then interest them in the candy-pulling machine in connection with it. I was not successful in coming to terms with any of the confectioners there with said stick-candy machine, so I never mentioned anything to any of them in regard to the candy-pulling machine, as I was in no way protected at that time from the Patent Office, and kept it a secret as much as possible." (P. 36–37). [167]

The only protection he had on his stick-candy machine was a *caveat*. His reasons for failing to push a valuable invention whose importance he realized are entirely unsatisfactory, and the fact that he made no attempt on this trip to interest anyone in the candy-pulling machine (XQ. 220) raises a strong presumption that he did not at that time have the invention.

Oppliger corroborates Jenner as to the building of the machine (Q. 13–22), and says that while getting ready to go to St. Louis, Jenner told him "that if he could make the success with his stick-candy machine in St. Louis, that he would also offer his candy-pulling machine" (Q. 221).

Robert Jenner testifies that he saw the machine in the spring of 1899 and likewise fixes the date with reference to his brother's St. Louis trip (Jenner Record, p. 215, Q. 3–10).

Lindenborn, a disinterested witness, testifies to having seen "Jenner's Exhibit Jenner Machine" between the first of January and the first of April, 1899, but does not state how he fixes the date.

Stauss, the blacksmith who assisted in the iron work of the machine, testifies as follows:

"Int. 11. Please look at the machine now present and state whether you have seen it before.

"Ans. Yes.

"Int. 12. Please look at your entry on your day book, which I now show you, and state what the date is and how the entry reads.

"Ans. 'Jany. 31st, 1899, Mr. Ed. Jenner, new irons and bending.'

"Int. 13. Please look at the machine before referred to and now present and state what connection, if any, there is between any parts in that machine and the work referred to in the entry on your day book of Jan. 31, 1899, as 'five new irons and bending.'

"Ans. I made them all; I remember having them in the shop and making them.

"Int. 14. Which parts of the machine do you so remember? [168]

(In answer witness points to the three stationary hooks, the two revolving hooks, and the two short shafts for the sprockets).

"Int. 15. When was this entry of Jan. 31, 1899, made by you in your day book?

"Ans. Jan. 31, 1899.

* * * * * * * * * *

"Int. 21. Talking again about this machine with the three stationary arms, and two revolving arms,

which you have said you made, who gave you the order for this work?

"Ans. Mr. Ed. Jenner.

"Int. 22. When he gave it to you, did he say what the work was to be used for?

"Ans. Yes."

Stauss' books show that he has been doing work for Jenner at various times since April, 1898 (Dickinson's Exhibit—Jenner Account on Stauss Books), and hence his fixing the date by the fact that it was the first work which was personally directed by Jenner (XQ. 37, 80, 114) is very unreliable.

Furthermore, the entry of January 31, 1899, relates to "5 new irons and bending," while both Jenner and Stauss testify that of the irons used in the machine three were old ones furnished by Jenner (Stauss, XQ. 48, 74; Jenner XQ. 923).

In support of the alleged change in the machine in September, 1899, the entry of September 16, containing several items is referred to (Q. 17). All of the items except one admittedly relate to wagon work (Q. 18), but in answer to a leading question, Stauss testifies that the one reading "bending iron threads" relates to irons for the candy-pulling machine (Q. 20).

The weight of Stauss' testimony is much weakened by the fact that Jenner after having the books in his possession for some time, showed Stauss these entries and told him that they were the ones referring to the machine (XQ. 112–113). [169]

On cross-examination Jenner testifies that Stauss did no work on any of his machines, except certain work enumerated, after November, 1899 (XQ. 767). Under date of April 23, 1900, on Stauss' books occurs the entry, "Ed Jenner, braces for candy-puller," which would seem to indicate, as contended for by counsel for Dickinson, that Stauss' work on the machine was done in 1900 in-

stead of 1899. Jenner upon being recalled was shown a candy-puller brace, and testified that it was made by Stauss for his stick-candy machine during the summer of 1901 (Jenner Record, p. 180, Q. 2–4). By repeated questioning he is led to say that though not quite certain he thinks it was in 1900 (Q. 6–7), and that it was "just by mistake" that he first said 1901 (Q. 8).

The books from June 12, 1900, to August 26, 1901, as well as Stauss' bill for that period (Jenner Record, p. 212, XQ. 24) are lost. This is the period following Dickinson's advertisement in a journal of which Jenner was subscriber, and which it is urged by counsel for Dickinson is the probable time that Stauss did the work on the machine. Stauss gave his books to Jenner and does not know what became of them after that (XQ. 101–104). The incomplete set of books put in evidence, in their present condition after remaining in Jenner's possession, are of but little value in establishing the date of the work done on the machine.

In Stauss' ledger which was not delivered to Jenner with the other books is an entry of September 2, 1902, in Jenner's account reading "setting iron, drilling holes." This might very reasonably apply to a candy-pulling machine, and tends to prove that the machine in evidence was built at that date. In the Day Book of that date the page is partially torn so as to remove all the entry except the last word and this word has evidently been changed from "hole" to "pole." This is one of several apparent alterations wholly unexplained which cast discredit [170] upon said books as corroborating evidence.

White, a disinterested witness, having been shown "Jenner's Exhibit Jenner Machine," testifies that he saw the machine in February, 1900, and which time it was covered up in a shed, and that Jenner got the machine out and explained its working (Q. 6). He fixes the date by a bill issued to him on February 16, 1900

(Q. 10–12). On cross-examination, however, it appears that possibly it was as late as August, 1900, that he saw the machine (Jenner Record, p. 206; XQ. 13–16).

Jenner claims that his mother and four of his sisters saw the machine either when it was first constructed or at different times thereafter. Only one sister is introduced as a witness and she is not questioned in regard thereto.

Jenner furnished Hildreth during their negotiations with affidavits or written statements of his wife, Robert Jenner, White and Oppliger. These early statements and affidavits Jenner refused to produce for examination, and the refusal to produce them, as well as the letter previously referred to giving the history of the invention, strongly indicate that they are not corroborative of the testimony in the record.

In view of the circumstances under which Jenner became a party to this interference, the refusal of Hildreth to purchase his invention unless he could go back of January, 1900, the circumstances surrounding the introduction of the Stauss Day Books, and the refusal to put important records in evidence and their subsequent loss, are so strong against Jenner, that in the opinion of the examiner, Jenner has failed to conclusively establish the early dates alleged by him.

But even if the machine in evidence was built at the date alleged, the evidence clearly shows that it was merely an abandoned experiment.

Jenner claims to have reduced his invention to practice [171] by constructing and successfully operating his machine in February, 1899 (Q. 4–7). During this time he carefully concealed his invention and it was not until nearly four years after his alleged reduction to practice and more than two years after other parties had given the invention to the public that he filed his application. He says that he realized the commercial importance of his machine, and yet confessedly it was not

until March, 1902, that he took any steps whatever towards getting a patent; and he took his first step only as a result of seeing a cut of the machine advertised by Hildreth (XQ. 805–810).

Love, in regard to a conversation with Jenner, alleges, "He said that he made it for his own use, and had no thought of getting a patent on it, as he had no money to do so, in the first place, and did not realize its full value then. Later he saw Hildreth's advertisement, and opened up a correspondence with him, and afterwards sold it," (Dickinson's Record, pp. 155, 156). Jenner, however, denies this (Jenner Record, pp. 228–229).

Jenner explains his long delay by alleging poverty (Q. 41; XQ. 812). It appears, however, from his own testimony that he had no difficulty in securing money to push his other inventions, (XQ. 546–550). He also gives the following reason for not earlier bringing forward his candy-pulling machine:

> "Cross-Int. 552. Please state why if you are able to get four hundred dollars invested in your chocolate-dipping machine and patent, and are able to get a thousand dollars and more invested in the stick-candy machine matter, you were not able to get during three or four years the money necessary to apply for a patent on the candy-pulling machine?
>
> "Ans. Said candy-pulling machine was a simple invention which would not have cost so much to get it patented, and as I did not expect at that time to assign any interest over to anyone else, as I expected to get a patent on it myself, the chocolate-drop and the stick-candy machine were complicated and expensive and thinking that I would make more money on them than I would on the pulling machine I tried to push them out first" (p. 89). [172]
>
> "Cross-Int. 554. Have you now given all the explanation which you know of why you did not make

an effort to get someone interested far enough so you could make a patent application on the pulling machine?

"Ans. The only reason is that I did not have the capital to do anything with it, as I had two inventions on the way already, I thought it best to wait until I got through with them" (p. 90).

It appears that Jenner's company paid him well and that he had funds of his own at his command (XQ. 920–922).

Aside from his long delay, the testimony of Jenner and his witnesses indicate that Jenner's machine was wholly experimental.

"Cross-Int. 245. Since you built this machine now here in evidence, in February, 1899, where has it been? Please state more in detail than you did on your direct examination.

"Ans. Most of the time it was under a shed adjoining this building, covered up with sacks, and boxes and barrels and thing of that kind placed on it occasionally. I only got it into the shop whenever I wanted to use it. After we were through I would take it right back out again" (p. 41).

"Cross-Int. 278. You have said in a general way that you used the machine as often as required. Did you pull candy always on this machine or usually on this machine, or sometimes on the machine and sometimes some other way? By "you" I mean you or your help in the factory?

"Ans. We did most of our pulling by hand up until about January, 1903, but before that time I occasionally brought it in when we were making taffy just principally to operate it, watch its movement and study up and see if there wasn't probably some other way of building a pulling machine besides this, as I had always been keeping this machine a secret from boys which were employed here, whom

I did not dare let see me operate said machine, for fear they would disclose it to others" (pp. 46–47).

"Cross-Int. 627. Can you give the months and the days of the months on which the dozen trials mentioned in your answer to Int. 623 took place?

"Ans. The first four or five trials were made in about February, 1899, then we made another operation on said machine in about November, 1899, and the next trial was made in about September or October, 1900. By trial, I mean operation. I don't exactly know what months it was used after that, as it was usually used during the days when we were not very busy" (p. 104). [173]

"Cross-Int. 646. Then these operations after November, 1899, were not for the purpose of studying tests, but an actual commercial use of the invention, were they not?

"Ans. They were not used entirely for a commercial use of the invention, but principally for tests. But said machine operated perfectly and we pulled said candy with perfect results, and said candy was sold, and we could then or at any time used said machine, if we so desired, for commercial use (p. 107).

From Jenner's own statement it appears that with his machine it required two or three persons to pull an amount of candy usually pulled by hand by one man (XQ. 63–66, 783–784). He admits that operating the machine as it was, "by hand with a large batch would be hard work, and I suppose if the candy-maker had his choice he would just as soon pull it by hand" (XQ. 616). Moreover, he admits that when so operated the candy is likely to fall off the hooks, but alleges that if operated by some other motive power it would run more successfully and that he is "ready to operate said machine and prove why the candy fell off the hooks and why we can keep it on now" (XQ. 68). He claims that it was his

intention to operate the machine by power and if so operated it "would give satisfactory results" (XQ. 617).

As above stated, by Jenner's own testimony he delayed nearly four years after his alleged reduction to practice before either giving his invention to the public or applying for a patent. Meanwhile other parties entered into the field, extensively advertised their machine, and Hildreth even had a machine in actual use in his factory over two years prior to Jenner's application.

The decisions of the courts are uniformly to the effect that delay and concealment under the circumstances here shown indicate that the alleged reduction to practice was no more than an abandoned experiment and at best bars a stale claim to priority (Warner vs. Smith, C. D. 1898, p. 517; McBerty vs. Cook, C. D. 1900, p. 248; Thomson vs. Weston, C. D. 1902, p. 52).

Dickinson alleges in his preliminary statement a reduction [174] to practice on January 29, 1900. The completion and test of the machine shown in the drawing of Dickinson's application is clearly established and is admitted, or at least not contested by the various parties to this interference. It is contended, however, that this machine was not operative and hence did not constitute a reduction to practice.

This first or "Grand Rapids Machine" was publicly tested on various occasions. Dickinson's testimony as to the successful operation of the machine is strongly corroborated by ten disinterested witnesses. Many of these witnesses base their conclusion not only from watching the operation of the machine and seeing the candy changed from a dark to a light color but from eating the candy which they saw made on the machine. Six of these witnesses are either manufacturers or are connected with factories and are especially competent to judge of the successful operation of machinery. While none of them are candy manufacturers, the manufacture of candy and the article itself are so simple in nature as

to render technical experience unnecessary in judging of the success of the operation and the character of the product.

Opposed to the testimony of these witnesses is that of three experienced candy manufacturers, Holman, Brooks and Putnam.

Holman, upon the invitation of Dickinson, witnessed the operation of the machine on at least two occasions (Hildreth Record, Q. 12–13). As to the reasons for the invitation by Dickinson, he says: "I believe his object was probably twofold, one being to get my opinion as a practical candy-maker, and the other to have me use my influence to place it in Putnam's factory" (Q. 36). His testimony regarding the tests is as follows: [175]

> "Int. 18. Will you state what opinion you formed from the work you saw done by the machine as to its practicability and commercial value?
>
> "(Objected to as immaterial and irrelevant, for the reason that the commercial value of the machine is not involved in this issue, nor is its practicability in the sense in which counsel may use that term).
>
> "Ans. In my opinion the machine was impracticable and of little commercial value, as far as I could see.
>
> "Int. 19. Will you please state fully what you saw the machine do and fail to do and give your reasons for your opinion above expressed?
>
> "Ans. The machine failed to answer its purpose because it operated in such a way that there was very little air in the candy after it had been pulled quite a while, and that it also failed on that account to change the color of the candy as it could be done by pulling it by hand. It simply slid the candy back and forth in the trough without making any great change in its consistency or improving its eating quality, which hand pulling does. It was very slow in its operation, and would therefore not save any

time, nor would it make good, merchantable candy." (Hildreth Record, p. 148.)

"Cross-Int. 32. In the course of its operation the machine did work the air from the candy to some extent and lighten the color to some extent, did it not?

"Ans. It did so to a small degree, concerning the length of the operation.

"Cross-Int. 33. Then your objection to the operation of the machine was that it did not work in enough air or lighten the color sufficiently to make the product, in your judgment, commercially satisfactory? Is that right?

"Ans. Yes, that is my opinion." (Hildreth Rec. p. 150.)

Holman further testifies that Fritz consulted him in regard to the machine and that he advised him not to invest in it as he did not think it would do the work it was intended to do. (Q. 21–24.) Fritz is one of the ten witnesses above referred to who regarded the operation of the machine as successful. He testifies:

"Q. 12. How many times did you see that machine actually pull candy? A. Twice.

"Q. 13. What can you say as to whether the machine on these occasions operated successfully, or otherwise? A. I saw the machine when it started to pull, and ate some of the candy after it was pulled. One occasion particularly, and I think both of them. [176]

"Q. 14. In your judgment, and from your observation of the machine at this time, was it, or was it not, a successful operative machine A. I considered that it was, as far as I knew. The machine done the work. I am not an expert in candy making. After it came out it was like other taffy I had seen and eaten.

"Q. 15. How long have you been familiar with machinery in a general way? A. About thirty years.

"Q. 16. You have been a manufacturer all that time, have you not? A. Yes, I have got up some inventions.

"Q. 17. What was the impression and belief produced on you at the time as to whether this would be a good machine, and would sell on the market? A. I thought he had a good thing, so far as I knew.

"Q. 18. What was the reason why you did not put in money and take an interest in it, as he desired? A. For one reason, we had plenty of business of our own to look after, and another reason, I wasn't familiar enough with that business to know what there was to be made out of it." (Dickinson, pp. 94–95.)

Brooks says that he saw the machine operate only once and it appears that on that occasion the machine broke before the operation was finished (XQ. 14–15, Hildreth Record). This renders of but little weight his testimony to the effect that the candy was not successfully pulled and was not of a marketable quality (Q. 12–13).

Putnam testifies that he saw the machine operate but once and that in his opinion that it did not pull the candy successfully and practically (Q. 11–12). On cross-examination it appears that he is not positive that the machine which he saw in operation was not a model previously built by Dickinson (Q. 10; XQ. 13).

Against the overwhelming testimony of many witnesses that the machine operated successfully, stands practically the sole testimony of Holman to the contrary, and his opinion is apparently based on the commercial utility of the machine. From the record it appears that Dickinson's first machine was successfully operated during February, 1900.

Dickinson extensively advertised his candy-pulling [177] machine and subsequently completed two other machines in the latter part of April, 1900, one of which was shipped to Greenfield Sons and Co., and the other to Hildreth, the senior party to this interference (Dickinson Record, Q. 90–91).

Dickinson testifies that before shipping the Greenfield machine he tested it several times and that it worked satisfactorily (Q. 94–95).

Irwin, superintendent of the Grand Rapids School Furniture Works, testifies that he saw either the machine put in evidence as Dickinson Exhibit, Greenfield Machine, "or one very much like it," in the shop where Dickinson built his machines (Q. 8–10). He is able to positively fix the date as between April 1 and May 1, 1900 (XQ. 19). He alleges that he saw it pull candy on one occasion (Q. 13); that the machine seemed to pull the candy all right and as he thought successfully; and that the parties operating the machine seemed well satisfied with what work it did. (Q. 15–16.)

Applegate, foreman of the Fred Macey Company, testifies that he saw either the Greenfield machine or a duplicate thereof (Q. 12) pulling candy on more than one occasion and that it seemed to do the work very successfully (Q. 14–15). He is able to positively fix the date as some time in April, 1900 (XQ. 26–30).

When the machine was shipped to the Greenfield Company they did not try it for some time and then they returned it. Kenny, superintendent of the company, testifies:

> "Int. 4. Please state how it operated; that is, to what extent did it pull candy successfully.
>
> "Ans. The machine pulled candy, but not to our satisfaction. (Hildreth Record, p. 144.)
>
> "Cross-Int. 7. After the machine had been operated a while, did you observe any mechanical defect?

"Ans. After trying the machine a while we found that the screw was bent.

"Cross-Int. 8. Did you find that it was bent in shipping before it was received here or while you were trying it? [178]

"Ans. I believe it was bent while trying it.

"Cross-Int. 9. Would it be possible to operate such a machine successfully or satisfactorily if the screw was bent?

"Ans. We stopped using the machine as soon as we found that the screw was bent as we did not care to go any further." (Hildreth Record, pp. 144–145.)

In the spring of 1902 a new counter-shaft was substituted for the old one (Richmond, Q. 39), and the machine then and the following year was again operated. Merrill, Richmond, Cole, Butler, Smith, Tim, McDonald and Thibodeau witnessed these later operations and all testify that the machine pulled candy successfully.

The Hildreth machine was tested by Hildreth and Dickinson in Hildreth's factory in May, 1900. Dickinson himself says "We made a test which was not satisfactory. The material furnished was of an entirely different character that I had ever pulled before. It seemed to require a higher speed than what we were able to give it on the machine as constructed" (Q. 105).

On May 21, 1900, Dickinson wrote to Hildreth (Hildreth Record, p. 15):

"We will be able to give such a quick motion to the head with the drum, that it will whiten out the candy quickly and work the air into it. This we did not seem able to do with the screw on account of the slow speed the head traveled. As I thought of it at your place it seemed an easy matter to attach this other movement, but there are a few changes I did not take into consideration until afterwards, so that it is taking a little longer than I anticipated. We are very anxious to make a machine

that will do your work. We only ask you to be patient a little longer and we will accomplish it. We expect to stand all expenses in making the test."

A week later Hildreth shipped the machine back to Dickinson (Hildreth Record, p. 16).

On May 15, 1900, a model of a candy-pulling machine had been constructed in Hildreth's factory and he had consulted his attorney for the purpose of getting the invention patented (Hildreth [179] Record, p. 6, Q. 24–27). It was no longer to Hildreth's interest that the Dickinson machine be adapted to do his work.

On May 18, 1900, Heath, Dickinson's financial backer, wrote to Hildreth asking his opinion in regard to the candy-pulling machine, in which letter he says: "I am putting up the money for manufacturing them, and before putting any more in it would like to hear direct from you." In his reply, Hildreth said: "I cannot see how it can ever be made to work" (Hildreth Record, p. 57). This letter was written subsequently to the building of the model in Hildreth's factory, and hence Hildreth at that time was Dickinson's rival.

As to his further endeavors to introduce the machines commercially Dickinson says:

"Q. 118. We have now carried this history down to the summer of 1900. The record shows that this application for a patent assigned to P. Duff & Sons, was not filed until the fall of 1901. Please explain why nothing was done in the meantime towards proceeding with the application which has been prepared?

"A. I was just as much out of funds at that time as when the application was first prepared. Mr. Heath announced that he would not put any more money into it, and my family had to eat.

"Q. 119. Were you able during that time, in any way to get together even thirty or forty dollars more

than was absolutely necessary for your living expenses?

"A. I was not. I had become so much in debt previous to this that I had a place for every dollar that I could get together over and above my living expenses. I could not abuse my friends any further by putting more money into this invention.

"Q. 120. State what your intention was during this time upon the subject of abandoning this invention, or proceeding to get it on the market?

"A. I never for a moment thought of abandoning it. On the other hand, at the very first opportunity I could get on my feet again, or partially so, would go on with it. (Dickinson Record, pp. 19–20).

"Q. 121. How and when were you first able to pay Mr. Brenner what you owed him for his work on these machines?

"A. At the time I made the transfer of the application to Mr. Merrill. It was part of the arrangement that Mr. Merrill should pay Mr. Brenner what I owed him on the first machine. (Dickinson Record, p. 20.) [180]

Stowe, a printer, who did some work for Dickinson in January, 1900, testifies that since 1898, Dickinson has been very hard up financially, having failed in every branch of business in which he was engaged. That out of sympathy for him he gave him credit and after carrying the account for about a year charged it to profit or loss. As to Dickinson's general reputation upon the subject of ability to pay his debts, from 1899 until the present time, he says, "He has been too hard up to pay anything" (Q. 20–28).

When Heath withdrew his financial support, the machines were taken away by him and stored in an empty building (Dickinson Record, p. 78, XQ. 201).

Dickinson testifies that on October 23, 1901, he assigned the invention, the consideration mainly being the pay-

ment by the assignee of some of Dickinson's debts due for previous services in connection with the invention, the entire consideration amounting to about one hundred and fifty dollars (R. D. Q. 268). His application for patent was filed on November 5, 1901, more than a year and a half after the construction of his first machine.

This case is believed to fall within the governing principle of Esty vs. Newton (C. D. 1899, 284) and McBerty vs. Cook (C. D. 1900, 248). As was said in these cases, delay is often a potent circumstance in aid of the determination in a case not otherwise clear of the question whether an invention has been successfully reduced to practice or had resulted in nothing more than an abandoned experiment. That point does not occur in this case, as the evidence of actual and successful reduction to practice is ample.

The public first obtained knowledge of candy-pulling machines from Dickinson. In this case, in the language of the court in [181] Esty vs. Newton, C. D. 1899, 284, there was no "concealment of the invention or its deliberate suppression in such manner or for such purposes as to bring his case within the operation of the principle governing the case of Mason vs. Hepburn (C. D. 1898, 510) and Warner vs. Smith (C. D. 1898, 517). * * * By actual reduction to practice the right to the invention becomes perfect and can only become subordinate to the claim of a subsequent *bona fide* inventor by some such course of conduct as that shown in Mason vs. Hepburn, *supra*, and the cases therein cited."

In the opinion of the examiner Dickinson is entitled to the date of February, 1900, as the date of his reduction of the invention to practice.

Dickinson having reduced the invention to practice and extensively advertised the machine, the only question that could arise was that of abandonment of the invention to the public. Such abandonment, however, is disproved by the filing of his application within two years

after the introduction of his invention to the notice of the public.

As between Thibodeau and Hildreth the question is solely one of originality. Hildreth is a manufacturer and has invented several appliances for aiding him in the manufacture of candy. Thibodeau is a skilled mechanic who from 1897 till December 15, 1900, was in the employ of Hildreth for the purpose of constructing, improving and perfecting such machinery as Hildreth might require in his factory.

As above stated Hildreth set up one of Dickinson's machines in his factory in May, 1900. The operation of said machine was unsatisfactory. Thibodeau was present at the trial and testifies that it then occurred to him that without changing the main principle of operation he could improve the mechanical means and increase the speed of operation. He says: [182]

> "A. I thought the great trouble with the machine was that the two pins on the cross-head would be better if they were further apart, so that they would swing further when they changed position, and take up all the candy that had been pulled, and I thought it would work better and with more power, if the center pin was swung from above.
>
> "Q. 21. How did you carry out this idea?
>
> "A. I practically turned the machine upside down, and made the center pin move with a pendulum motion, suspended from above, and put the other two pins further apart." (Dickinson Record, p. 115.)

He alleges that he explained his idea by a sketch to his brother and later to Hildreth, and that while Hildreth did not "think much of" the idea, he gave permission to Thibodeau to construct a model (Dickinson Record, p. 116, Q. 33–34; Thibodeau Record, p. 11, P. 35–37). Subsequently he built a large machine which was completed and tested on or about June 12, 1900 (Hildreth Record, p. 2). Thibodeau, of course, alleges that no

one's ideas except his own were embodied either in the model or the large machine.

The only witness on behalf of Thibodeau is his brother, John Thibodeau, who says:

> "On or about that time, May, 1900, the contestant, Charles Thibodeau, showed me a chalk drawing of a machine for pulling candy to whiten it, the drawing showing a swinging lever and two relatively stationary but oscillating pins. I immediately thereafter helped the contestant, Charles Thibodeau, build the model of the machine that he explained to me by the said drawings."

There is nothing in John Thibodeau's testimony inconsistent with Hildreth's claim to inventorship.

Hildreth in his preliminary statement alleges that he conceived the invention in July, 1894, disclosed it to others on or about August 1, 1894, and made a drawing and a model, on or about December 26, 1897. In his testimony he does not support these allegations as to conception and disclosure in 1894.

Hildreth alleges that in December, 1897, he made a sketch of the invention in his diary (Q. 3–5). "Hildreth's Exhibit [183] Facsimile of Diary Entries," showing said sketch is clearly inadmissible. It is not the best evidence, no satisfactory reason being shown for the nonproduction of the diary itself; and even an inspection of the diary by the opposing counsel being refused (Hildreth Record, p. 80).

Hildreth alleges that prior to July 1, 1899, he had talked with his attorney, Browne, about a candy-pulling machine (XQ. 58). As to his disclosure of the invention at that time he says:

> "I also took a piece of pasteboard, with two pins, one at each end, put a tack in the center, and tacked it on to his desk. Then I took my lead pencil in one hand, moving it backward and forward above the

pasteboard, at the same time moving the pasteboard with my other hand, showing him the motion and principle of my invention."

He says that prior to ordering the Grand Rapids machine he consulted his attorney for the purpose of learning whether the ordering of Dickinson's machine would affect his going ahead and building his own machine previously explained to said attorney. (Q. 13).

He is fully corroborated by Browne, who gives the date of disclosure as in the early part of the year 1899 and fixes the date by the fact that it was about a year previous to his being consulted by Hildreth with reference to the Grand Rapids machine of Dickinson (Hildreth Record, p. 139, 140).

Hildreth alleges that he also explained the invention to his brother Nelson Hildreth, and to Hooten in the summer or fall of 1899 (XQ. 90, 91).

Nelson Hildreth testifies to a disclosure of the invention to him as alleged by his brother, and fixes the time as in the early part of 1898 (Hildreth Record, p. 109, Q. 23–31). He also alleges that said disclosure was about four or five months prior to the test of the Grand Rapids machine (Q. 29). He is unable on redirect examination to explain this discrepancy as to dates (Q. 74), but is positive that such disclosure was prior to the [184] appearance of the circular advertising the Dickinson machine (Q. 75).

Hooten also corroborates Hildreth as to the disclosure of the invention to him in the early fall of 1899 (Q. 5–9; XQ. 28–33).

Hildreth alleges that he on May 15, 1900, explained the invention to Thibodeau by making a sketch upon a board of the principles of the invention and told him to make the model (Q. 30 and XQ. 121). This, of course, is denied by Thibodeau. This model did not contain any mechanism for producing the proper time relation of the various

parts. Such mechanism as embodied in the machine of June 12, 1900, Hildreth admits was the work of Thibodeau as a skilled mechanic in his employ (XQ. 292–295).

Hildreth also alleges that he conceived the idea of providing the candy-puller with a "flaring or spreading end" and Nelson Hildreth testifies to having heard him direct Thibodeau to make such change in the machine (Hildreth Record, p. 105).

Hildreth alleges that as early as December, 1897, he was satisfied of the operativeness of the invention which he had conceived. For over two years no steps were taken by him towards the reduction of the invention to practice. His excuse is that he was too busy (XQ. 65), and did not find an opportunity to construct the machine, which as shown required but a few days' work, until immediately after seeing the operation of the Grand Rapids machine (XQ. 67, 139–150). Such excuse, in view of the circumstances, is utterly inadequate, and Hildreth's conduct subsequent to his alleged conception of the invention is such as to raise a strong presumption that what he had and disclosed was merely an idea that by following out certain lines it might be possible to construct a candy-pulling machine.

The showing made by both Thibodeau and Hildreth is very unsatisfactory. In support of Thibodeau's claim is his uncorroborated statement that he was the inventor and the admission that [185] he constructed both the model and the full-size machine. Against his claim to inventorship is his own admission that he knew that Hildreth was preparing a patent application for the invention (XQ. 168) and the additional fact that when he himself filed his application on November 26, 1900, it was for the rotary machine, an improved type, subseqeuntly invented by him. It was not until August 3, 1901, that he filed an application showing the first or pendulum machine.

Browne, referring to his interviews, as attorney for Hildreth, with Thibodeau testifies:

> "At none of my interviews with Mr. Thibodeau, either when the model was tested or the full-sized machine was tested, or when Mr. Stone and I called on him as last stated, did he ever intimate to me, or to anyone else in my hearing, that he made any claim to having invented this pulling machine or any pulling machine, although the fact that Mr. Hildreth was to apply for a patent thereon was repeatedly mentioned in his presence, and on the occasion of my last visit, expressly referred to."

In Miller vs. Kelley, C. D. 1901, 405, the Court said: "What we hold is that when in the course of experiment by an employer with an invention a device is suggested for its improvement which in itself would reach the dignity of independent invention, and a dispute arises between employer and employee as to its conception, the presumption is in favor of the employer; and it is incumbent on the employee to overcome that presumption by satisfactory proof."

Thibodeau claims that his invention resulted from an experiment by his employer Hildreth with the Grand Rapids machine, and that he, Thibodeau, suggested a device for improving said machine. Therefore, as following from his own statement of facts, it becomes incumbent upon him in his dispute with Hildreth as to inventorship to overcome the presumption in favor of his employer by satisfactory proof (Miller vs. Kelley, *supra*). His uncorroborated statement, even taken in connection with the weak and unsatisfactory showing on the part of Hildreth, does not constitute such proof. [186]

The following conclusions are reached by the examiner:

Jenner by reason of his unsatisfactory record and his long delay and concealment of his invention is not entitled to an award of priority.

Robinson and Deiter by taking no testimony rely upon their record date and having filed subsequent to Dickinson, Thibodeau, and Hildreth, cannot prevail.

Dickinson reduced the invention to practice in February, 1900.

Thibodeau by his record fails to prove that he is an original inventor.

Hildreth reduced the invention to practice on June 12, 1900, a date subsequent to Dickinson, and fails to connect said reduction by diligence to a conception prior to Dickinson's entry into the field.

Judgment of priority of invention of the issue of this interference is awarded to Herbert M. Dickinson, a junior party.

Limit of appeal from this decision will expire June 14, 1904.

C. F. FITTS,
Examiner of Interferences.

May 25, 1904.

[Endorsed]: Plf. Exhibit #7. Herbert L. Hildreth v. E. J. Smith Co. Filed in evidence June 19, 1916. Edwin R. Williams, Clerk.

Exhibit No. 5, Complainant Thibodeau Interference. Filed in court October 13, 1913.

Filed January 26, 1918. G. H. Marsh, Clerk. [187]

Plaintiff's Exhibit No. 2.

Exhibit 9

UNITED STATES OF AMERICA.
Department of the Interior.
United States Patent Office.

To All to Whom These Presents Shall Come, GREETING:

THIS IS TO CERTIFY that the annexed is a true copy from the Records of this office of the Decision of the

Examiners-in-Chief dated July 27, 1904, in the matter of Interference Number 21,523

JENNER

v.

DICKINSON

v.

THIBODEAU

Subject Matter: Candy-pulling Machine.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the city of Washington, this 9th day of October, in the year of our Lord one thousand nine hundred and thirteen and of the Independence of the United States of America the one hundred and thirty-eighth.

[Seal] R. T. FRAZIER,

Acting Examiner of Patents. [188]

Recorded Vol. 31½, p. 13.

E. C. C. Appeal No. 25,857—Paper No. 9.

No. 25,857 Decision.

U. S. Patent Office, July 27, 1904.

Before the Examiners-in-Chief, on Appeal.

In the matter of the interference between the application of Edward J. Jenner, filed Nov. 13, 1902, the application of Edward M. Robinson and Jacob H. Deiter, filed July 12, 1902, the application of Herbert M. Dickinson, filed Nov. 5, 1901, the application of Charles Thibodeau, filed Nov. 26, 1900, and the application of Herbert L. Hildreth, filed Sept. 21, 1900. Interference No. 21,523.

Improvement in Candy-pulling Machines.

Messrs. ALEX. P. BROWNE and FOSTER, FREEMAN & WATSON, Assocs. for Jenner.

Messrs. EDW. TAGGART and JAMES L. NORRIS, Assoc. for Dickinson.

Messrs. WRIGHT, BROWN & QUINBY, for Thibodeau.

Messrs. ALEX. P. BROWNE and FOSTER, FREEMAN & WATSON, Assocs. for Hildreth.

The issue is:

> "A candy-pulling machine comprising a plurality of oppositely disposed candy hooks or supports, a candy-puller, and means for producing a specified relative in and out motion of these parts for the purpose specified."

An examination of this record leads us to the same conclusion reached by the Examiner of Interferences, who has discussed the record at length, and it is unnecessary here to repeat that discussion.

The Examiner of Interferences' conclusions are stated as follows: [189]

> "Jenner by reason of his unsatisfactory record and his long delay and concealment of his invention is not entitled to an award of priority.
>
> Robinson and Deiter by taking no testimony rely upon their record date and having filed subsequent to Dickinson, Thibodeau, and Hildreth, cannot prevail.
>
> Dickinson reduced the invention to practice in February, 1900.
>
> Thibodeau by his record fails to prove that he is an original inventor.
>
> Hildreth reduced the invention to practice on June 12, 1900, a date subsequent to Dickinson, and fails to connect said reduction by diligence to a conception prior to Dickinson's entry into the field."

At the hearing and in the brief it was urged that Dickinson has no right to make the claim in issue, and it was suggested that we make a recommendation, under Rule 126, to that effect.

This we decline to do. The same question has been raised on a motion to dissolve. On this motion the Commissioner stated as follows:

> "The issue clearly applies to each party's device, unless the words referred to above are construed as

limiting the claims to the particular construction and to the particular motion disclosed. Such a limited construction of the issue is not warranted, and it is not to be presumed that the parties in drawing the claims intended that they should have that limited meaning. They are entitled only to equivalents, and to that extent nothing which is not substantially like that specified in the description comes within the scope of the claim. The words 'a specified,' however, have no more limiting effect than the ordinary concluding words, 'substantially as described.' "

The decision of the Examiner of Interferences awarding priority of invention to Herbert M. Dickinson is affirmed.

Limit of appeal will expire August 26, 1904.

J. H. BRICKENSTEIN,
S. W. STOCKING,
T. G. STEWARD,
Examiners-in-Chief.

[Endorsed]: Pltff. Exhibit No. 6. Herbert L. Hildreth v. E. J. Smith Co. Filed in evidence June 19, 1916. Edwin R. Williams, Clerk.

Exhibit No. 6. Complainant, Thibodeau Interference, 1?/13/13. Filed in court October 13, 1913.

Filed U. S. District Court, January 26, 1918. G. H. Marsh, Clerk. [190]

Plaintiff's Exhibit No. 3.

Ex. 10.

UNITED STATES OF AMERICA.
Department of the Interior.
United States Patent Office.

To All to Whom These Presents Shall Come, GREETING:

THIS IS TO CERTIFY that the annexed is a true

copy from the Records of this office of the Decision of the Commissioner dated December 6, 1904, in the matter of

Interference Number 21,523

JENNER
vs.
DICKINSON
vs.
THIBODEAU

Subject Matter: Candy-pulling Machine.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the city of Washington, this 9th day of October, in the year of our Lord one thousand nine hundred and thirteen and of the Independence of the United States of America the one hundred and thirty-eighth.

[Seal] R. T. FRAZIER,
Acting Commissioner of Patents. [191]

Sept. 23, 1904. N. H.
No. 21,523. Int. No. 21,523. Paper No. 5.
Commrs. Decision.
Recorded Vol. 81, page 273.

UNITED STATES PATENT OFFICE.

Jenner vs. Dickinson vs. Thibodeau.
Candy-pulling Machine.
Appeal from Examiners-in-Chief.

Application of Edward J. Jenner filed November 13, 1902, No. 131,156.

Application of Herbert M. Dickinson filed November 5, 1901, No. 81,277.

Application of Charles Thibodeau filed November 26, 1900, No. 37,734.

Mr. A. P. BROWNE and Messrs. FOSTER & FREEMAN, for Jenner.

Mr. EDWARD TAGGART and Mr. JAMES L. NORRIS, for Dickinson.

Messrs. WRIGHT, BROWN & QUINBY, for Thibodeau.

Jenner and Thibodeau have appealed from the decision of the examiners-in-chief, affirming the decision of the Examiner of Interferences, awarding priority of invention upon the following issue to Dickinson:

> "A candy-pulling machine, comprising a plurality of oppositely disposed candy hooks or supports, a candy-puller, and means for producing a specified relative in-and-out motion of these parts for the purpose specified."

The interference originally included five parties, but the decision against two of them has become final by their failure to appeal.

Jenner, who was a candy manufacturer in San Antonio, Texas, claims in his testimony to have conceived the invention in the summer of 1897 and to have reduced it to practice in February, 1899, by the construction of the machine in evidence as "Jenner Exhibit Candy-pulling Machine." [192]

Dickinson seems to have been a manufacturer of candy-making machinery at Grand Rapids, Michigan, and he claims to have conceived his invention involved in this interference in 1895, and to have made a machine embodying it in January, 1900, which machine is in evidence as "Grand Rapids Machine." On behalf of Jenner and Thibodeau it is admitted that this machine was made in January, 1900.

Thibodeau is a machinist who claims to have conceived the invention May 10, 1900. Thibodeau was then employed by Hildreth, formerly a party to this interference, and admits that he conceived his invention after seeing a machine made by Dickinson, which was shipped to Hildreth's factory (Q. 6). That Dickinson machine was like the one in evidence and corresponded to the disclosure in Dickinson's application. It is very clear, therefore, that as between Dickinson and Thibodeau, Dickin-

son was the first in point of time to make his invention. Thibodeau, therefore, cannot be awarded priority of invention, so long as Dickinson is a party to the interference and his machine is regarded as coming within the issue.

On behalf of Jenner it is contended that the machine shown in Dickinson's application and embodied in his machines does not correspond to that described in the issue and that therefore Dickinson has no right to make the claim of the issue. If this contention were sustained, it would be necessary to dissolve the interference as to Dickinson. It is to be noted that Hildreth made a motion early in these proceedings to dissolve the interference, and urged therein that Dickinson had no right to make the claim, for the reason that it would not apply properly to his construction. It was further urged then, as it is now, that Dickinson's device was inoperative as a candy-pulling machine. The mechanism in Dickinson's device will undoubtedly operate as described in his specification, but it is contended [193] that it will not produce the effect on the candy which follows from pulling it and which follows from the use of the machines of the other parties.

The primary examiner decided on the motion that Dickinson is entitled to make the claim of the issue, and no such showing has been made as would warrant disturbing his decision or remanding the case to him for reconsideration. Dickinson seems to have the elements of the machine called for by the issue, and those elements are mechanically operative. It may very well be that the other machines are improvements upon what Dickinson shows and that they will produce better results, but it does not follow that his machine was inoperative. The record furnishes no justification for the conclusion that Dickinson's machine was useless, whatever conclusion may be reached as to the comparative superiority of the various machines.

The only question remaining to be determined is that of priority as between Jenner and Dickinson.

Dickinson filed his application November 5, 1901, more than one year before Jenner's filing date. The burden is therefore upon Jenner to show either a completion of the invention by reduction to practice before that date or prior conception connected by diligence with subsequent reduction to practice. The evidence on his behalf does not establish either of these. The machine said to have been made by him in February, 1899, was clearly nothing more than an experiment. It was not a successful reduction to practice, and it is very clear from the testimony that Jenner was not diligently engaged in efforts to perfect his invention from that date until he filed his application.

Dickinson calls attention to certain suspicious circumstances and contradictions in the evidence on behalf of Jenner, and contends that it cannot be relied upon as establishing the facts alleged. Even if the facts are as stated by Jenner, [194] however, he cannot prevail in this proceeding. According to his statements he built a candy-pulling machine in February, 1899, and gave it four or five trials (XQ. 627). In the fall of that year he built a second machine, using parts of the first machine in its construction (XQs. 94–97). This second machine had no gear or chain (XQ. 98), and it is said that it was tested in November, 1899 (XQ. 627), and that two batches of candy were pulled on it (XQ. 100). About November 10, 1899, this second machine was dismantled and changed so as to correspond to the first, and the chain was then added (XQs. 101, 102). The revoluble hooks or arms were changed at this time from straight to curved (XQ. 104).

Jenner says:

> "I operated said third machine several times during the month of November, 1899, and then occasionally up until date." (A. to XQ. 103.)

Jenner's answers are not very clear and definite as to when or how the machine was operated, but taking all of his statements together it is clear that he simply operated it a few times for experiment. It is to be noted that Jenner did not file his application for three years after November, 1899, when he claims to have made the last change in the machine, and that he did not use the machine regularly in his business or build others like it. He says that before November, 1902, he used his candy-pulling machine "probably a dozen times," (XQ. 623), and pulled one batch of candy each time (XQ. 624). He further says, as to these various operations of the machine:

> "The first four or five trials were made in about February, 1899, then we made another operation on said machine in about November, 1899, and the next trial was made in about September or October, 1900. By trial, I mean operation. I don't exactly know what months it was used after that, as it was usually used during the days when we were not very busy." (A. to XQ. 627.) [195]

He says, "We did most of our pulling by hand up until about January, 1903" (XQ. 278), although he claims that he then had this machine and that it had proved satisfactory in use as far back as 1899.

The failure of Jenner to use the machine instead of pulling the candy by hand leads irresistibly to the conclusion that he did not have the machine or that it was not satisfactory. According to his own statement, when he had much candy-pulling to do he pulled it by hand, and when he was not busy he tried his machine. This is surely not consistent with the idea that the machine was successful.

Jenner admits that for most of the three years he kept the machine in a shed in the yard, covered with boxes, barrels, etc., and the witness White says he saw it in an

old shed and that "it was quite covered up and looked to me more like rubbish" (Q. 6).

The circumstances under which Jenner filed his application and became a party to this interference are sufficient to throw suspicion upon his claims and make it incumbent upon him to present clear and convincing proof. It appears that he was induced to file his application by Hildreth and to assign it to Hildreth after Hildreth had been involved in interference with the other parties and knew their date of invention. Hildreth had correspondence with Jenner in regard to purchasing his invention and as to the date when it was made. Opposing counsel asked for the production of the letter in which Jenner stated his dates, but the request was refused on the ground that it contained private matter. Notice was subsequently given that application would be made to the Court for an order compelling the production of the letter, and it was then said that the letter was lost. Dickinson urges with much force that this circumstance was so suspicious as to throw doubt upon Jenner's whole story. It is unnecessary, however, to pass upon the [196] question as to the sufficiency of the evidence to establish the building of the machine at the time stated, for the machine, even if built, does not entitle Jenner to the decision as first inventor. Jenner delayed three years after the alleged construction of the machine and during that time made no proper efforts to perfect his invention or to file an application.

The decision of the examiners-in-chief, awarding priority of invention to Dickinson, is affirmed.

F. I. ALLEN,
Commissioner.

December 6, 1904.

[Endorsed]: Plf. Exhibit #5. Herbert L. Hildreth vs. E. J. Smith Co. Filed in evidence June 19, 1916. Edwin R. Williams, Clerk.

Exhibit No. 7, Complainant, Decision of Commissioner, Interference Thibodeau, October 12, 1913. Filed in court October 13, 1913.

Filed U. S. District Court, January 26, 1918. G. H. Marsh, Clerk. [197]

Plaintiff's Exhibit No. 4.

Exhibit No. 11.

Pat. No. 288.

EDWARD J. JENNER,

Appellant,

vs.

HERBERT M. DICKINSON.

Pat. No. 290.

CHARLES THIBODEAU,

Appellant,

vs.

HERBERT M. DICKINSON.

OPINION.

These are appeals from the decision of the Commissioner of Patents in an interference case, wherein there were originally five contestants, but only two have brought their case in this court. The subject matter of controversy is a candy-pulling machine intended to do away with the old method of pulling candy by hand; and the invention is stated in the proceedings in the Patent Office in the following language:

> "A candy-pulling machine comprising a plurality of oppositely disposed candy hooks or supports, a candy-puller, and means for producing a specified relative in and out motion of these parts for the purpose specified."

For this invention Herbert M. Dickinson, of Grand Rapids, Michigan, filed an application on November 5, 1901; Herbert L. Hildreth, of Boston, Massachusetts, on September 21, 1900; Charles Thibodeau, of Somerville, Massachusetts, on November 26, 1900; Robinson and Deiter, of Lancaster, Pennsylvania, on July 12, 1902; and Edward J. Jenner, of San Antonio, Texas, on November 13, 1902.

Of these Robinson and Deiter took no testimony, and relied upon their filing date (July 12, 1902), which was subsequent to that of Hildreth, Thibodeau and Dickinson. Of course they cannot prevail; and they dropped out of the case after [198] the decision of the examiner of interferences, from which they seem to have taken no appeal. Hildreth also has dropped out of the case. The decision of the examiner of interferences was adverse to him; and he did not appeal from it. However, he owns by assignment the invention or claim of Jenner; and it is he in fact and not Jenner who is prosecuting. And he is also involved in two other interferences with Thibodeau upon substantially the same subject matter now pending before this court. Only the claims of Jenner, Thibodeau and Dickinson are now here pending before us; and the claims of Thibodeau and Dickinson have been assigned to Kitzmiller and Duff, of Pittsburg, Pennsylvania.

Jenner in his preliminary statement alleges conception of the invention by him in 1896; drawings and disclosure about February 1, 1898; and reduction to practice about February 1, 1899.

Dickinson in his statement alleges conception, drawings and disclosure by him in September of 1895, and reduction to practice on January 29, 1900.

Thibodeau in his statement alleges conception and disclosure by him in 1894; a drawing and a model made by him in 1897; and reduction to practice on June 11, 1900.

Thibodeau, it may be remarked, at the time of his alleged invention was a machinist in the employment of Hildreth, and deputed, it would seem, by the latter to make tests and improvements on candy-pulling machines; and it is the same act that is regarded as a reduction to practice both by Thibodeau and Hildreth, the issue between these two being that of originality rather than that of priority of invention.

Upon the testimony adduced in the case all the tribunals of the Patent Office concurred in awarding judgment of priority of invention to Dickinson; and Jenner and Thibodeau have appealed to this court. [199]

We find no sufficient reason to question the correctness of the conclusions reached by the tribunals of the Patent Office in these interferences. We think those conclusions were fully warranted by the evidence. Taking it as the pivotal point in the controversy that Dickinson reduced the invention to practice by the construction of an operative machine, if it was operative, on or about January 29, 1900, and that he applied for a patent for the invention within two years thereafter, on November 5, 1901, we find that Thibodeau confessedly did not conceive the invention, as embodied in the machine constructed by him, until May 10 1900, at least three months afterwards and then only after seeing one of Dickinson's machines. So there is no reasonable ground for controversy between Dickinson and Thibodeau other than the question of the operativeness of Dickinson's machine. But this operativeness has been amply proved. Undoubtedly Dickinson's machine is not the best of those that have been offered in evidence in this case: Thibodeau's is probably an improvement on it; but it embodies the principle of the invention, and it has been successfully operated. To that effect is the great preponderance of the evidence.

The real contest in this case is between Dickinson and Jenner; but this has been rightly decided in favor of

Dickinson. Jenner claims to have conceived the invention and embodied it in an operative machine as early as September of 1899; but the testimony adduced to establish his claim is full of inconsistencies and contradictions, and does not greatly commend itself to our consideration. If he conceived the invention, as he claims he did, as far back as 1899, he waited for over three years, until November 13, 1902, before he filed his application, and did nothing whatever in the meantime except to keep his machine concealed under a heap of rubbish and to make it out occasionally, according to his own statement, merely to experiment with it. And yet he seems to have read a notice of Dickinson's invention in 1900; and [200] during all the time for which he waited there was great demand for some such article in the trade, and there would have been great use for it even in his own establishment. And at last, when he entered into the field, it was under circumstances of great suspicion, induced to do so by Hildreth, to whom his invention now belongs. We cannot attach any value to the testimony adduced on his behalf.

We agree with the Commissioner of Patents and the other tribunals of the Patent Office that Dickinson is clearly entitled to judgment of priority of invention. The decision of the Commissioner is therefore affirmed.

Affirmed.

The clerk will certify this opinion and the proceedings in this court to the Commissioner of Patents according to law.

M. F. MORRIS,
Associate Justice.

[Endorsed]: Nos. 288 and 290 Patent Appeals. Edward Jenner, Appellant, vs. Herbert M. Dickinson and Charles Thibodeau, Appellant, vs. Herbert M. Dickinson. Opinion of the Court per Mr. Justice Morris. Court of

Appeals, District of Columbia. Filed April 4, 1905. Henry W. Hodges, Clerk.

A true copy.

Teste: HENRY W. HODGES,
Clerk of the Court of Appeals of the District of Columbia.
[Court of Appeals, District of Columbia, Seal]

[Endorsed on back]: Pltff. Ex. #4. Herbert L. Hildreth vs. E. J. Smith Co. Filed in evidence June 19, 1916. Edwin R. Williams, Clerk.

Exhibit No. 8, Complainants, Interference Thibodeau, October 13, 1913. Filed in court Oct. 13, 1913.

Filed U. S. District Court, January 26, 1918. G. H. Marsh, Clerk, District of Oregon. [201]

Plaintiff's Exhibit Nos. 5 and 6.

IN EQUITY.

In the United States District Court for the District of Maryland.

HERBERT L. HILDRETH,

Plaintiff,

vs.

LAUER & SUTER COMPANY,

Defendants.

ROSE, District Judge.

The plaintiff says the defendant infringes in the aggregate five claims out of a much larger number contained in two patents owned by him. These patents are for candy-pulling machines. In the last few years the candy pulling industry has been revolutionized. Prior to the beginning of this century candy was always pulled by hand. In factories that operation is now performed by machinery. One small and simple machine will do the work of ten men

and will do it better than they can. Out of a less expensive grade of sugar the machine will make a more attractive and salable candy. The machine made product is more sanitary because its method of manufacture has been far more cleanly.

The plaintiff owns patents which purport to cover the essential features of all the machines now in use. Whether these broad claims are valid is therefore of great importance not only to the parties to this suit, but to the trade generally. The plaintiff has more than 300 machines out on lease and license at an annual rent of $250 each. The record does not tell what it costs to build one of them. It may be fairly inferred, however, from what is stated that a single year's rent will repay all the money laid out in construction and will leave a satisfactory and perhaps a handsome profit. Large as is the plaintiff's income from these royalties, his licensees, if his patents are valid, have no [202] cause to complaint. A human candy-puller is paid about $14 per week. The weekly wages of ten of them would aggregate $140. One of them can tend two or three machines. At $250 per annum the weekly rental of a machine is something less than $5. Where only one machine is in use its rental and the wages of the operator foot up $19 per week, as against a wage bill of $140 when the same amount of candy is pulled by hand. Doubtless there are other features to be considered. In practice the economics from the use of the machine may not be so great as this record would indicate. Nevertheless, after all possible deductions have been made, they must still be relatively large.

In considering the validity of the claims in suit, it will be necessary to refer to four other patents, making thus six in all, of which mention must be made. Applications for all these were at one time simultaneously pending in the Patent Office. As they were originally presented every one of them contained one or more claims which

the Examiner held to be in interference with all the others. In some instances the applicants withdrew the broad claims which were said to be in conflict with those of the other inventors, and accepted patents which covered merely the special types of machines designed by them. In other cases the question of priority was, after a more or less prolonged contest, determined by the Patent Office. Two of the applicants carried the struggle clear to the Court of Appeals of the District of Columbia. The respective dates at which the patents were applied for, still less the dates of their issue, do not show their relative legal priorities. It so happens, indeed, that the first patent to come out of the office is the last in right.

It will be worth while to arrange these six patents in the order in which in law they rank. [203]

Rank.	Inventor.	Number.	Date of Issue.
1	Dickinson,	831,501	September 18, 1906.
2	Hildreth,	832,384	October 2, 1906.
3	Jenner,	804,726	November 14, 1905.
4	Thibodeau,	736,713	August 11, 1903.
5	Robinson,	881,442	March 10, 1908.
6	Henry,	731,681	June 23, 1903.

Each of these patents will be hereafter referred to by the name of the inventor for whose invention it was granted.

There was one idea which was common to all these applications as they were first presented. It was formulated by the Patent Office in the following claim:

> "A candy-pulling machine comprising a plurality of oppositely disposed hooks or supports, a candy-puller and means for producing a specified relative in and out motion of these parts for the purpose specified."

As Dickinson was the victor in the interference proceedings, this claim was awarded to him. It constitutes the first claim of his patent and is the more important of

the two claims of that patent in suit in the pending case. The relative in and out motion referred to was accurately described by Dickinson in his application as one which would cause the candy to move along a path corresponding to the figure 8.

The Patent Office was right in finding this feature in every one of the six applications. It was the basic principle common to all of them. It made every one of them a more or less operative machine for pulling candy. No earlier attempt to invent a candy-puller had made use of it. Without it the prior art was destitute of any machine which had any value either as a candy-puller or as a suggestion of how a useful one might be constructed. So soon as it was discovered progress was rapid.

In a previous case between the same parties now before the court, and in which suit was brought upon the Hildreth patent, it was said (204 Fed. 792) that the various inventors heretofore mentioned "apparently had no means of learning what [204] the others were doing." In that case the file-wrappers in the various interference proceedings were not in evidence. They now are. Circumstances disclosed by them strongly suggest the possibility, if not the probability, that most, if not all, the applicants, other than Dickenson, before they perfected their inventions or filed their applications had either seen his machine or a description of it.

Dickenson before applying for a patent advertised his machines for sale. The plaintiff was then a candy manufacturer, as he still is. He saw how valuable a really effective candy-puller would be. He made prompt application for a patent for one of his own devising. He subsequently purchased Jenner's invention even before a patent for it was applied for. During the prolonged interference proceedings between Dickenson and the plaintiff as assignee of Jenner, the invention of the former had passed, together with those of Thibodeau and

Robinson, into the hands of third parties. When the Court of Appeals of the District of Columbia awarded priority to Dickenson, the plaintiff purchased the inventions of Dickenson, of Thibodeau, and of Robinson. When the Dickenson, the Hildreth, the Jenner, and the Robinson applications passed to issue they all belonged to the plaintiff. He at that time owned the Thibodeau patent which had been previously issued.

Dickenson had vindicated his claim to having been the first discoverer of the basic principle and the first person to reduce it to practice. It was he who had found out that a combination of a candy-puller and a plurality of oppositely disposed candy hooks or supports could be given a relative in and out motion which would carry candy along a figure 8 pathway and that candy could thereby be pulled.

For practical use his machine had a number of shortcomings. Some of them were serious. One of the gravest of these was that [205] the candy had to be dragged along a trough, because the trough was the only means by which in it the candy could be supported against gravity. Dickinson apparently had the idea that his pins or hooks would also serve the purpose of supports to the candy. In his machine, however, they did not to any useful extent do so. Hildreth devised one in which they would. The latter asked for, and in his patent was given, a claim broad enough to cover every machine in which Dickenson's fundamental discovery was embodied and in which the pullers or hooks supported the candy against gravity. His machine was for commercial use a great step beyond that of Dickenson. It nevertheless from a practical standpoint left much to be desired. His pins or hooks or supports were perpendicular. Two of them projected from the bottom of the machine upwards. The third was a long pendulum-like contrivance which hung down from above. The machine was cumbersome

and space-consuming. For a short while after a batch of candy was put upon it the support given by it against gravity was imperfect.

Jenner's contribution to the art was the discovery that the pins, hooks, or pullers could be so arranged that they would project from the frame of the machine in a horizontal direction. One of them could be stationary as one of them in Dickenson's machine was. The movement of the others would, as in Dickenson's, give the required relative in and out motion. Such a machine would support the candy at all times. It could be more compactly constructed than that of Hildreth and apparently with fewer and less expensive parts.

The broad claim of Jenner's patent is one of those here in suit. It is for a "candy-pulling machine comprising horizontally-disposed stationary supporting means and a plurality of pulling means."

The alleged infringing device in this case is constructed in accordance with the disclosures of the Henry patent. That [206] patent was the last of the six to be applied for. When an interference was declared between its original claims, or some of them, and those of the other applicants, Henry canceled such of his claims as were said to conflict with those found in other pending applications. He said at that time in his formal communication to the Patent Office that he directed the cancellation "with a view of avoiding a long and expensive proceeding which he was financially unable to stand." He added that "he thus limits his claims to his particular type of a double-acting machine so that he might obtain his patent for his precise species." In this machine there is a horizontally disposed support and a plurality of oppositely disposed hooks or pins which having among themselves and the stationary support a relative in and out motion, pull the candy along a figure 8 pathway and at the same time support it against gravity.

If the broad claims of the Dickenson and Jenner patents, already quoted, and the fourth claim of the Hildreth patent, are valid and are to be construed according to the more natural import of their language, Henry infringes all of them. Henry, by declining to go into interference, obtained his patent with its limitations years before those of Dickenson, Hildreth, or Jenner emerged from the office. His assignees at once went into the business of making and selling machines. Quite a large number were in use in various parts of the country before Hildreth was in a position to begin any legal proceedings. When he finally obtained his patents he began, or threatened to begin, suits against both the makers and the users of the Henry machines. The then owners of the Henry patent thereupon agreed to assign it to Hildreth. He paid them some thousands of dollars for it. Stipulation was made that he would release all of his claims against those who had used machines sold by his assignees, provided, however, that such users surrendered the machines they had to him. Such surrenders were to be made upon terms which, [207] from his standpoint and upon the assumption that the broad claims of his patents were valid, were fair enough. The defendant, however, refused to accept them or to cease using a Henry machine of which it had become the owner. Plaintiff sued it for infringing the fourth claim of the Hildreth patent. In this court that claim was held invalid (204 Fed. 792) and his bill dismissed. He appealed. The case is now pending before the Circuit Court of Appeals of this circuit.

It is possible that the decree below may be affirmed. The plaintiff knows how great a change the series of inventions described in the patent herein mentioned have wrought in the candy business. He owns all the patents for them. Those patents contain broad claims and many others which deal with diverse forms of machines in which the primary claims may be embodied. Not un-

naturally he may feel that in some way and under some of the claims of these patents he may be entitled to stop the use without his consent of a machine which to him appears to be clearly within their terms. Upon the dismissal of his bill founded upon the fourth claim of the Hildreth patent he began this new suit against the same defendant. In this he relies upon the first and second claims of the Dickenson patent and upon the first, seventh, and eighth of that to Jenner. The question as to some of these claims lies within a narrow compass and may be disposed of with few words.

The second claim of the Dickenson patent is for the combination "in a candy-pulling machine of a stationary candy pin, a set of candy-hooks and means for moving and shifting one of said hooks in relation to the other substantially as described." The claim has clear reference to a detail of the construction of the Dickenson machine. Whenever the so-called hooks of that machine reached either end of the trough their position to [208] each other was automatically changed. In the Henry machine no such shifting is required or, except in the loosest use of language, takes place. It is true that the hooks in the Henry machine, as in the Dickenson, have in relation to each other and to the stationary member an in and out motion, but that motion in the Henry machine does not depend upon the use of a shifting device such as that shown in the Dickenson or upon any equivalent of such device. The claim appears to be valid, but it is not infringed.

> "The first claim of the Jenner patent is for a candy-pulling machine comprising horizontally disposed stationary supporting means and a plurality of pulling means."

The Henry machine has a horizontally disposed supporting means. It has a plurality of pulling means. If the claim is valid it can be read upon the Henry device.

There is no apparent reason to give it a construction more narrow than its words imply. Jenner was not a pioneer in the same sense or in the same degree as was Dickenson. He used Dickenson's basic principle of the relative in and out motion of a plurality of oppositely disposed hooks forcing the candy along the figure 8 pathway. He adopted Hildreth's idea of using the hooks and pullers to support the candy against gravity, and in such a machine he disposed his support horizontally. He doubtless was entitled to a patent for a combination of these elements from Dickenson and Hildreth with his own contribution to the art. He had no right, however, to bar all the world from inventing, if they could, candy-pullers which worked on a different principle from that of Dickenson. He could not say that in such machines, radically different as they were from anything he had devised, the inventors could not use a horizontally dis posed hook if they found it convenient so to do. If he could, Hildreth could have monopolized the field for perpendicular supports. A third [209] patentee might have claimed every machine in which the supports lay in some plane between horizontal and perpendicular. In that simple way those who had made various forms of a machine operating on what was essentially the same fundamental principle, could close the door against all other inventors even if they devised machines of a radically different type. The first claim of the Jenner patent must be held invalid as being much broader than any invention disclosed.

The seventh and eighth claims of the Jenner patent are limited to a machine of a particular construction. The seventh claim reads as follows:

> "A candy-pulling machine comprising a framing, a pin carried by the frame and shafts supported by the framing on opposite sides of the pin and having crank arms and pins carried thereby and arranged

to revolve around the pin of the frame and means for driving the shafts substantially as set forth."

It is admitted that this claim, as well as the eighth, which need not be quoted *in extenso,* can be read literally upon the Henry machine. It is objected, however, that the actual machine shown and described in the drawings and specifications of the Jenner patent is different both from the Henry machine and from any machine upon which the claims could be read. The machine shown in Jenner's drawings has three stationary and two revolving pins. In that machine the two which are movable revolve in the same direction. In a machine so constructed there must be more than one stationary pin if candy is to be pulled. But the specifications clearly say that if the movable pins are made to revolve in opposite directions, the results will be at least equally good. When so made to revolve we have the Henry machine. It is a mere matter of detail, then, whether there is or is not more than one stationary pin. The seventh and eighth claims of the patent are not limited to a machine in which there is more than one stationary pin. The seventh and [210] eighth claims of the Jenner patent seem to be valid and to be infringed by the Henry machine. That machine is doubtless an improvement on the Jenner. If the owner of the Jenner patent were a different person from the owner of the Henry, the former would not be entitled to use the special feature of construction which appears to be the only thing covered by the Henry patent, but that, of course, would give the proprietor of the latter no right to use the Jenner either with or without the addition of his own improvement.

There remains for consideration the first claim of the Dickenson patent. In terms it may be read upon the Henry machine. It is said, however, first, that there is implied, although not expressed in the Dickenson claim, an element which does not exist in the Henry machine,

and that consequently there is no infringement. In the Dickenson machine the candy is put in a trough and is made to move over the bottom of the trough in a figure 8 path. The trough is the only thing which to any appreciable extent supports the candy against gravity. If there were no trough or substitute for it the candy would fall to the ground and the machine would be inoperative. Under these conditions the defendant says that the trough being an essential portion of an operative machine, constitutes a necessarily implied element of Dickenson's first claim.

In passing upon this contention it must be borne in mind that in all the years during which this patent was before the Patent Office, no one ever supposed that a trough was an element of this claim. The office found this claim in effect in every one of the six applications as they were at first presented. It is certain that a trough did not constitute an element of that claim in any of the other five. But the interference was declared and so long contested because everybody understood that every one of the six applicants was making the same claim, not [211] only in words, but in fact.

Dickenson and everybody else knew that in order that his puller and hooks could pull the candy, the candy must be where they could take hold of it. Some way of supporting it against gravity was an obvious necessity. It does not follow that the patentee is bound to make any one of these ways an element of his claims. He shows a method of pulling candy in accordance with what he says is his inventive idea. In the illustration the candy is supported against gravity. That way of supporting it is not, however, a necessary element of his combination. He elected to make it an element of some of his claims, as, for example, of the fourth and the fifth. Wherever he has done so he is bound by it. Wherever he has not included it in words there is no reason to

suppose either that he in fact intended to do so by implication or to say that the law will make the implication whether he wanted to or not. The new thing which he found out was not a trough, but the fact that if you give to a plurality of oppositely disposed candy hooks and a candy-puller a peculiar kind of in and out motion that will force the candy along the figure 8 path you will pull it. He was entitled to patent that combination. He had also the right to claim as a more restricted combination because limited by more elements, the very form of machine in which he had used that which was broader and more all embracing. If his claim for that larger conception is invalid either because it is in its nature a claim for the function of a machine, or because he failed to embody it in any operative device, it will be stricken down. That, however, is no reason for saying that he intended to include in it an element which it is absolutely certain he wanted to exclude.

The defendant contends that the Dickenson patent is invalid because it is for an inoperative device. In the interference proceedings the same contention was made by the present [212] plaintiff. Every one of the Patent Office boards and officials before which the interference came decided that it was not well founded. The Court of Appeals of the District of Columbia agreed with them. The thorough investigation which Dickenson's application then received as a result of that long-drawn-out contest in which this very issue was repeatedly raised, adds unusual weight to the ordinary presumption of validity which attaches to every patent. In this connection also it is necessary to keep in mind for what invention this claim was granted. As already pointed out, the great thing which Dickenson found out was that oppositely disposed candy hooks and a candy-puller given a specified in and out motion would move candy along a figure 8 pathway and would thereby pull it. That con-

ception, instead of being inoperative, is in operation in every one of the hundreds of candy-pulling machines now in use. It is operating to-day to pull almost all the candy which is pulled in these United States. He complied with the requirements of the law by devising a machine which would give this in and out motion to the hooks and puller and would move the candy along the designated road. It is true that it is highly doubtful whether with his machine candy could be pulled for commercial purposes. The form of telephone which Bell made was valueless for practical use. Dickenson was able to see what had for years been hidden from all others. His discovery was illuminating. His execution poor. In patent cases it has been often noted that persons of the most brilliant conceptions are sometimes the poorest mechanics.

In view of the action of the Patent Office and of the Court of Appeals of the District of Columbia, of the facts disclosed by this record, and of the principles laid down in many well considered and authoritative decisions, the defense of inoperativeness cannot be sustained.

Telephone Case, 126 U. S. 535. [213]

Crown Cork & Seal Co. vs. Aluminum Stopper Co., 108 Fed. 845.

Van Schmidt vs. Bowers, 80 Fed. 149.

Packard vs. Lacing Stud Co., 70 Fed. 67.

Defendant says, however, that if so much be held against it, still this claim must be stricken down because it is so broad that it is for the function or mode of operation of a machine. In most cases in which a claim has been held to be functional, the inventor has claimed more than he invented, or at all events he claimed an exclusive right to do in any and every way something that other people had wanted to do before he did it. He asserted this right merely because he was the first person who had succeeded in doing it at all. The possi-

bility and the desirability of using the power of the electric current to make intelligible signs at great distances had been recognized by many men before Morse found a method of doing it. Being the first inventor of that method he was entitled to the monopoly of it for the statutory period. Moreover, as a pioneer he was entitled to have his claims so construed as to cover the broadest possible range of equivalents. Yet in his famous eighth claim he asked for more. If it were valid he would have the right to say that other men who had been seeking the same goal could not now approach it even by a path over which he had thrown no light.

In the former case between the parties now before the Court, if it be permissible to compare a relatively small invention with one which was epoch-making, it was held that Hildreth could not sustain a claim which would have given him a monopoly of every way of supporting candy against gravity by the use of the hooks and pullers moving according to Dickenson's conception. The desirability of so supporting the candy was obvious. It might be invention to find a way of doing it. The first man who did it might be entitled to say that no one else should do it in any way so like his as to make it probable that it was suggested by his discovery. But he would have no right to shut off other men from using those hooks or pullers in a radically different way though [214] for a like end and with a like ultimate result.

Before Dickenson perfected his invention men had wanted a candy-pulling machine. He found out how one might be made. That would have given him no right to a claim for a machine to pull candy. Such a claim would have been in relation to what he actually invented, as the eighth claim of Morse or as the fourth claim of Hildreth. But before Dickenson no one had wanted to make a machine with the in and out motion. That it was desirable to make such a machine for such a purpose

was his idea. Whatever may be said of his claim, it is at least no broader than was his invention.

But is there any real reason for saying that a claim limited to a combination of a plurality of oppositely disposed candy hooks or supports, a candy-puller and means for producing a specified relative in and out motion of these parts for the purpose of making candy travel over a figure 8 pathway, is in any sense functional?

It may perhaps have some affinity to a claim for a mechanical process. If so it will be none the worse. The doubt long entertained as to whether a mechanical process as distinguished from a chemical one is patentable, no longer exists.

Expanded Metal Co. vs. Bradford, 214 U. S. 366.

In no ordinary sense of the words does this claim appear to be functional. It is true that it covers many different machines which in appearance and details of construction are very unlike that of Dickenson and are, as among themselves, dissimilar. Yet it covers them because the operative principle in all of them is the one he was the first to contribute to the industrial knowledge of mankind. He brought that discovery to the Patent Office, that appointed treasury and storehouse for additions to the world's stock of materially useful information. He left it there and [215] received in return the price the Government offers to all inventors—the exclusive monopoly for seventeen years of the right to make, use and vend his invention. There is every reason why he should not be allowed to receive or to hold a grant which goes beyond the price he has paid, there is none why he should be deprived of any part of the invention he has made, when, as in this case, he has asked for and been given an aptly worded grant which accurately defines the precise limits of that which was the essence of his invention.

It follows from what has been above said that the first claim of the Jenner Patent 804,726 will be held invalid.

The second claim of the Dickenson patent 831,501 will be held valid but not infringed, and the first claim of the Dickenson and the seventh and eighth of the Jenner both valid and infringed.

A draft of a decree to that effect and for an injunction and an accounting if desired may be presented. [216]

Plaintiff's Exhibit No. 6.

In the District Court of the United States for the District of Maryland.

IN EQUITY.

HERBERT L. HILDRETH

vs.

LAUER & SUTER COMPANY.

INTERLOCUTORY DECREE.

This cause having come on to be heard upon the pleadings, and upon the testimony of witnesses taken orally in open court, and after hearing George P. Dike, Esq., and Edwin F. Samuels, Esq., for the plaintiff, and Richard B. Tippett, Esq., E. Walton Brewington, Esq., and George Lindsay, Esq., for the defendant, and after due proceedings had:

It is this 29th day of November, 1913, ORDERED, ADJUDGED and DECREED as follows:

1. That letters patent of the United States No. 804,726 to Edward J. Jenner, dated November 14, 1905, for Candy-pulling Machines are good and valid in law as to claim 7 and 8 thereof, but that claim 1 thereof is invalid.

2. That letters patent of the United States No. 831,501 to Herbert M. Dickenson, dated September 18,

1906, for candy-pulling machines, are good and valid in law as to claims 1 and 2 thereof.

3. That the plaintiff Herbert L. Hildreth is the lawful owner of both of said letters patent No. 804,726 and No. 831,501 respectively.

4. That the defendant the Lauer & Suter Company has infringed upon the letters patent, in that it has infringed upon said first claim of the Dickenson patent No. 831,501 and upon the said seventh and eighth claims of the said Jenner patents, [217] and upon the exclusive rights of the plaintiff under the same, but the defendant has not infringed said second claim of the said Dickenson patent.

5. That the plaintiff recover of the defendant the profits, gains, and advantages which the said defendant has derived, received or made since May 26, 1907, by reason of the infringement of claims 7 and 8 of said Jenner patent No. 804,726, and that the plaintiff do recover of the defendant the profits, gains and advantages which the said defendant has derived, received, or made since May 26, 1907, by reason of its infringement of claim 1 of the said Dickenson patent No. 831,501, and the damages which the plaintiff has suffered by reason of such infringement of letters patent No. 804,726 and No. 831,501 aforesaid.

6. That the matter of the determination of the amount of said gains and profits and damages be and the same hereby is reserved for the further consideration by this court.

7. That an injunction issue out of and under the seal of this Honorable Court directed to the defendant, the Lauer & Suter Company, its directors, officers, attorneys, clerks, agents, servants, workmen, confederates, and conspirators, enjoining and restraining them and each of them, until further ordered by this court, from any further manufacture, use, or sale in any manner of any device embodying the invention, or any substantial part

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thereof, claimed in said first claim of said Dickenson patent No. 831,501 and the said seventh and eighth claims of said Jenner patent No. 804,726, and from infringing upon or violating either of said letters patent in any way whatsoever.

8. That the plaintiff do recover of the defendant his costs and disbursements of this suit to be taxed.

JOHN C. ROSE,
District Judge. [218]

United States of America,
District of Maryland,—to wit.

I, Arthur L. Spamer, Clerk of the District Court of the United States for the District of Maryland, do hereby certify that the aforegoing are true copies of the opinion of the Court and final decree, which were entered and filed on the 17th day of November, 1913, and 29th day of November, 1913, respectively, in the therein entitled case of Herbert L. Hildreth vs. Lauer and Suter Company, No. 27—Equity Docket, in said District Court.

IN TESTIMONY WHEREOF, I hereunto set my hand and affix the seal of said District Court, this 24th day of September, 1917.

[Seal] ARTHUR L. SPAMER,
Clerk.

Filed January 26, 1918. G. H. Marsh, Clerk. [219]

Plaintiff's Exhibit No. 7.

United States Circuit Court of Appeals, Fourth Circuit.

No. 1257.

THE LAUTER & SUTER COMPANY,
Appellant,

versus

HERBERT L. HILDRETH,
Appellee.

Appeal from the District Court of the United States for the District of Maryland, at Baltimore.

(Argued May 20, 1914—Decided Nov. 9, 1914.)

Before KNAPP and WOODS, Circuit Judges, and McDOWELL, District Judge.

GEORGE W. LINDSAY and HECTOR T. FENTON (R. B. TIPPETT & SON, on Brief) for Appellant, and GEORGE P. DIKE (MacLEOD, CALVER, COPELAND & DIKE, on Brief), for Appellee.

WOODS, Circuit Judge:

The reasoning of the District Judge, by which he reaches the conclusion that the defendant's candy-pulling machine operating under the Henry patent is an infringement of the prior right of the complainant Hildreth as assignee under the first claim of the Dickinson patent, leaves nothing to be added. While strong argument against it has been submitted we think it remains unbroken.

It is necessary, however, to refer more at length to the finding by the District Court that the use of the Henry machine by the defendant is an infringement of the [220] complainant's right as assignee under the seventh and eighth claims of the Jenner patent. The seventh and eighth claims of the Jenner patent are as follows:

> "7. A candy-pulling machine, comprising a framing, a pin carried by the frame, and shafts supported by the framing on opposite sides of the pin and having crank-arms, and pins carried thereby and arranged to revolve around the pin of the frame, and means for driving the shaft substantially as set forth.
>
> "8. A candy-pulling machine having shafts provided with crank-arms and pins thereon and the framing supporting said shafts and having a pin

around which the pins of the crank-arms revolve, substantially as set forth."

After noticing the admission that these claims may be read literally upon the Henry patent, the District Judge thus clearly shows the infringement:

"It is objected, however, that the actual machine shown and described in the drawings and specifications of the Jenner patent is different both from the Henry machine and from any machine from which the claims could be read. The machine shown in Jenner's drawings has three stationary and two revolving pins. In that machine the two which are movable revolve in the same direction. In a machine so constructed there must be more than one stationary pin if candy is to be pulled. But the specifications clearly say that if the movable pins are made to revolve in opposite directions the results will be at least equally good. When so made to revolve we have the Henry machine. It is a mere matter of detail then whether there is or is not more than one stationary pin. The seventh and eighth claims of the patent are not limited to a machine in which there is more than one stationary pin. The seventh and eighth claims of the Jenner patent seem to be valid and to be infringed by the Henry machine. That machine is doubtless an improvement (309) on the Jenner. If the owner of the Jenner patent were a different person from the owner of the Henry, the former would not be entitled to use the special features of construction which appears to be the only thing covered by the Henry patent, but that would give the proprietor of the latter no right to use the Jenner either with or without the addition of his own improvement."

This reasoning is in accord with the principle laid down in Paper Bag Patent Case, 210 U. S. 405.

It is insisted on appeal, however, that assuming the orrectness of the reasoning as to the priority of the 'enner patent over the Henry patent, yet the decree on his point should be reversed because Jenner's seventh nd [221] eighth claims were anticipated by Thibo-eau's patent of 11 August, 1903, under an application iled 10 July, 1901.

Having held that the Dickinson machine was the origi-ıal invention on which all the other patents were 'ounded, it must have under the general rule a broader 'onstruction than the others which could not claim to)e anything more than improvements on Dickinson's nvention by operating his device under better condi-litions. Miller vs. Eagle Manufacturing Company, 151 U. S. 186. Bundy Mfg. Co. vs. Detroit Time-Register Co., 94 Fed. 524.

Hence, although Thibodeau's invention had rotary pins or hooks which were horizontal while those in the Dickinson machine were perpendicular and some of them stationary, yet Thibodeau's machine was an infringe-ment, except as to his improvement. But Thibodeau's improvement could not have the broad construction as to equivalents allowed to an original inventor.

Jenner was junior to Thibodeau and therefore if there s no essential difference, the complainant could not have an injunction against the defendant under Jenner's seventh and eighth claims while Thibodeau's senior right was outstanding. The main difference asserted by complainant's counsel is that in Thibodeau's machine the hooks move and revolve, while in the Jenner ma-chine some of the hooks or pins are stationary. We think this difference clearly appears from the claims filed in the Patent Office, although it is earnestly con-tended by counsel for defendant that the seventh and eighth claims of Jenner do not show stationary pins or hooks. [222]

The description of a pin in the frame and shafts with crank-arms revolving around the pin in the frame, clearly implies that the pin was stationary. Indeed, this difference was admitted in the printed brief filed by counsel for defendant and was recognized and acted upon the Patent Office.

Affirmed.

True copy.

[Seal] Teste: HENRY T. MELONEY,
Clerk U. S. Circuit Court of Appeals, 4th Ct.
By Claude M. Dean,
Deputy Clerk.

Filed January 26, 1918. G. H. Marsh, Clerk. [223]

Plaintiff's Exhibit No. 8.

COPY.

In the United States District Court, Southern District of Florida.

IN CHANCERY.

HERBERT L. HILDRETH

vs.

E. J. SMITH COMPANY.

This cause comes on to be heard upon the bill of complaint, the answer thereto, and the testimony taken before the Court, and said cause was argued and submitted by counsel for the respective parties.

The bill of complaint charges an infringement of claim 1 of the Dickenson Patent, No. 831,501, issued in 1906.

The answer of the defendant denies the infringement and alleges that said claim 1 is void.

The testimony shows that the complainant is the owner of the Dickenson patent, and that said patent was duly

issued by the Patent Office after a considerable contest before the Patent Office and before the Court of Appeals of the District of Columbia, and that claim 1 was sustained in all these proceedings; so that it may be assumed without fear of successful contradiction that said Dickenson patent is valid in this particular claim.

The testimony further shows that the defendant was operating a machine manufactured under a patent, No. 752,979, issued to Igou for improvement in candy-pulling machine. The application for this patent was filed September 17, 1903, and allowed and issued February 23, 1904.

The application for the Dickenson patent for a candy-pulling machine was filed November 5, 1901, and patent therefor [224] after a contest as above noted, issued September 18, 1906. Thus the Dickenson patent, while junior in time of issuance, is senior in rank. Claim 1 of the Dickenson patent, which it is claimed the Igou patent infringes, is as follows: "A candy-pulling machine comprising a plurality of oppositely disposed candy hooks or supports, a candy-puller, and means for producing a specified relative in-and-out motion of these parts for the purpose set forth."

An examination of the drawings and models of the two patents will show that the Igou machine produces the same movement of the candy while being pulled as does the Dickenson machine, to wit, "a specified relative in-and-out motion of these parts."

While the machines are entirely different in appearance, the result of their operation, to wit, the pulling of the candy in a figure 8 movement is exactly the same, and accomplished by hooks or pins, and is, I have no doubt, an improvement on the original machine. But this does not authorize the use of the patented idea covered by claim 1 of the Dickenson patent.

I therefore find that the Igou machine, operated by

the defendant, does infringe claim 1 of the Dickenson patent, of which the complainant is the owner.

A decree will be entered finding the equities with the complainant, and referring this cause to a special master to assess the damages resulting to said complainant by reason of the operations of defendant, and enjoining said defendant from further operation of the Igou machine.

RHYDON M. CALL,
District Judge.

Jacksonville, Fla., July 28, 1916.

[Endorsed]: "Opinion." Filed July 28, 1916. Edwin R. Williams, Clerk. [225]

United States District Court, Southern District of Florida.

United States of America,
Southern District of Florida.

I, Edwin R. Williams, Clerk of the District Court of the United States, in and for the Southern District of Florida, and as such the legal custodian of the records and files of said office, do hereby certify that the foregoing is a true and correct copy of "Opinion" in the case of Herbert L. Hildreth versus E. J. Smith Company, as appears of record in this office.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of said court this the twenty-first day of September, 1917.

[Seal] EDWIN R. WILLIAMS,
Clerk United States District Court, Southern District of Florida.

Filed January 26, 1918. G. H. Marsh, Clerk. [226]

Plaintiff's Exhibit No. 9.

COPY.

In the United States District Court, Southern District of Florida.

IN EQUITY.

H. L. HILDRETH,

Complainant,

vs.

E. J. SMITH COMPANY,

Defendant.

FINAL DECREE.

This cause coming on this day to be heard upon the pleadings and testimony and having been argued orally and the Court finding that claim No. 1 of the Dickenson patent No. 831,501 is good and valid in law, and that the defendant has infringed upon the same, and that the equities of this cause are with the complainant, and that he is entitled to the relief prayer in and by his bill of complaint, now therefore upon consideration thereof, it is ORDERED, ADJUDGED and DECREED,—

1. That letters patent of the United States 831,501 to Herbert M. Dickenson, dated September 18, 1906, upon application dated November 5, 1901, for candy-pulling machines are good and valid in law as to claim No. 1 thereof,

2. That the complainant Herbert L. Hildreth is the lawful owner of said letters patent 831,501.

3. That the candy-pulling machine used by the defendant and manufactured under patent 752,979, dated February 23, 1904, upon application dated September 17, 1903, known as the Igou machine, is an infringement on the first claim of the said Dickenson patent 831,501, and upon the exclusive rights of the complainant herein thereto and thereunder. [227]

4. That an injunction issue out of and under the seal of this court directed to the defendant E. J. Smith Company, its directors, officers, servants, agents, employees, attorneys, clerks, workmen, confederates and conspirators enjoining and restraining them and each of them, from any further use, manufacture, or sale of any machine or device embodying the invention or any substantial part thereof claimed in said first claim of the said Dickenson patent 831,501, and from infringing upon or violating said letters patent in *any whatsoever.*

5. That the defendant do forthwith deliver to the complainant the said Igou machine now in its possession.

6. That the complainant do have and recover of and from the defendant its costs, charges, and expenses in this behalf expended and herein taxed at $———, for which let execution issue.

7. That Chas. S. Adams, Esq., be and he is hereby appointed Special Master herein with directions to take the testimony of the parties hereto on the question of damages sustained by the complainant and report the same to this Court together with his findings of fact and conclusions of law thereon with all convenient speed.

8. That the Court retain jurisdiction of this cause for such other orders as may be necessary or convenient in the premises.

Done and ordered this 6th day of September, 1916.

RHYDON M. CALL,
Judge.

[Endorsed]: "Final Decree." Filed September 6, 1916. Edwin R. Williams, Clerk.

United States District Court, Southern District of Florida.

United States of America,
Southern District of Florida.

I, Edwin R. Williams, Clerk of the United States District [228] Court, in and for the Southern District of Florida, and as such the legal custodian of the records and files of said office, do hereby certify that the foregoing is a true and correct copy of the final decree in the case of Herbert L. Hildreth versus E. J. Smith Company, as appears of record in this office.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of said court this the twenty-first day of September, 1917.

[Seal] EDWIN R. WILLIAMS,
Clerk United States District Court, Southern District of Florida.

Filed January 26, 1918. G. H. Marsh, Clerk. [229]

Plaintiff's Exhibit No. 12.

Portland, Ore., Jan. 25, 1917.

Within twelve days from date hereof, I promise to pay to H. L. Hildreth the sum of one hundred dollars on agreement to be then made for lease on candy-pulling machine Hildreth Style A No. 345, for one year, and pay second hundred dollars on such lease within three months from date, or in case I do not pay said first $100 within 12 days, I promise to pack and ship said machine prepaid freight to H. L. Hildreth at Boston, Mass., and send shipping bill to G. Ward Kemp, at Seattle, Wn.

S. PAPAS.
J. M. MASTORAS.

Filed January 26, 1918. G. H. Marsh, Clerk. [230]

Plaintiff's Exhibit No. 13.

UNITED STATES OF AMERICA.

Department of the Interior.

United States Patent Office.

To All to Whom These Presents shall Come, GREETING:

THIS IS TO CERTIFY that the annexed is a true copy from the Records of this Office of the File-wrapper and Contents in the matter of the

Letters Patent of

Herbert M. Dickinson, Assignor, by mesne assignments, to Herbert L. Hildreth

Number 831,501 Granted September 18, 1906

for

Improvement in Candy-pulling Machines.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this 6th day of October, in the year of our Lord one thousand nine hundred and seventeen and of the Independence of the United States of America the one hundred and forty-second.

[Seal] F. W. H. CLAY,

Acting Commissioner of Patents. [231]

NUMBER (SERIES OF 1900). Div. 15.
81277. 1901.
PATENT NO. 831501. (Ex'r's Book). 191
2353
R. W. Merritt.

Name—Herbert M. Dickinson, Assor. by mesne Assigts. to Herbert L. Hildreth of Boston, Mass.
Of Grand Rapids,
County of ——,
State of Michigan.
Invention—Candy-pulling Machine.

PARTS OF APPLICATION FILED	ORIGINAL		RENEWED.
Petition	Nov. 5	, 1901)	, 190
Affidavit	" "	, 1901)	, 190
Specification	" "	, 1901)	, 190
Drawing	" "	, 1901)	, 190
Sub " 1 sheet	Aug. 21	, 1906	, 190
Model or Specimin		, 190)	, 190
First Fee Cash $15.	Nov. 5	, 1901)	, 190
" " Cert.		, 190)	, 190
Appl. filed complete	Nov. 5	, 1901)	, 190

Examined—Chas. C. Stauffer Ex.
Aug. 22, , 1906) , 190
Countersigned—W. W. Mortimer, , 190
For Commissioner For Commissioner
Notice of Allowance, August 24 , 1906) , 190
Cert.
Final Fee ~~Cash~~ Dated Aug. 30 , 1906) , 190
" " Cert. $20 Aug. 31 , 1906) , 190
Patented September 18 , 1906
Associate Attorney—Jas. L. Morris,
City.
Attorney—Edw. Taggart,
Grand Rapids, Mich.
John C. Penie—Asso.,
Washington, D. C.

Name
Patent No.
Serial Number
Date of Patent

[232]

Examiner's Room No.

Grand Rapids, Oct. 23, 1901.

Hon. Commissioner of Patents,
Washington, D. C.

Sir:

Please recognize JAMES L. NORRIS, of Washington, D. C., as my associate in the matter of the application of

HERBERT M. DICKINSON

for Letters Patent for Candy-pulling Machines filed herewith ———, 18——, Serial No.

Very respectfully,

EDWARD TAGGART,
Attorney for Dickinson. [233]

APPLICATION FOR U. S. LETTERS PATENT.
AMOUNT RECEIVED.
$15
CHIEF CLERK.

PETITION.

To the Honorable Commissioner of Patents,
Washington, D. C., U. S. A.

Your petitioner, Herbert M. Dickinson, whose post office address is Grand Rapids, Kent County, Michigan, and who is a citizen of the United States, residing at Grand Rapids in the county of Kent and state of Michigan, prays that Letters Patent may be granted to him for the improvement in Candy pulling machines set forth in the annexed specification.

And he hereby appoints EDWARD TAGGART, of the city of Grand Rapids, state of Michigan, whose register number is 1302 his attorney with full power of substitution and revocation, to prosecute this application, to make amendments therein, to sign his name to the drawings, to receive the Letters Patent, and to transact all business in the Patent Office connected therewith.

HERBERT M. DICKINSON.

SPECIFICATION.

To All Whom It may Concern:

BE IT KNOWN, That I, Herbert M. Dickinson, a citizen of the United States, residing at Grand Rapids, in the county of Kent and state of Michigan, have invented new and useful improvements in Candy-pulling Machine of which the following is a specification: [234]

This application refers to a machine designed for the pulling of candy, and is adapted to mechanically pull candy so as to produce the same or better results than are usually produced by hand pulling. The invention consists in combining with a trough or suitable receptacle for supporting the candy to be operated upon, July 30–06 ~~of~~ pins or hooks adapted to travel within the said receptacle and to be shifted in the course of their " travel so as to pull all portions of the candy within placed ~~with~~ the receptacle. Also to combine with a series of pins or hooks suitable means for operating the same, substantially as hereinafter described.

The objects of my invention are:

First, to provide a machine which mechanically pulls candy, in order to produce the same result as hand pulling and in a better degree.

Second, to facilitate and cheapen the process of pulling candy.

Third, to furnish a machine for operation on the candy which will produce a superior article.

These objects I accomplish by means of the structure particularly shown and illustrated in the accompanying drawing, in which

Figure 1 shows a perspective view of a machine constructed in accordance with my invention.

Figure 2 shows a plan view of the trough or candy support, with the operating pins or hooks and trips in position.

b. C
7.21-06

Figure 3 shows a detailed view of the screw threaded shaft which operates the moveable hooks or pins.

A shows a frame work of any suitable material or form for supporting the trough and operating mechanism.

B shows the trough or receptacle supported on the frame work, which said trough or receptacle may be made in any suitable form, the object of said trough being merely to receive and support the batch of candy to be operated upon.

C shows the screw threaded nut which engages with a reciprocating [235] slide T for the purpose of giving a reciprocating motion of said slide and the movable pins or hooks.

D and D′ are stops, one at each end of the candy receptacle and are adapted to change the position of the pins F and F′ when brought into contact with said stops, as hereinafter described.

E is the arm on the plate E′ which supports the pins F and F′.

F and F′ are pins carried by the plate E′ and are adapted to be turned when the arm E comes in contact with D or D′.

July 30-06

example

G is the stationary pin which, in the ~~sample~~ of my invention shown in the drawings, is secured to the bottom of the candy receptacle B.

P and P′ are idler pulleys on an extension of the screw shaft H.

P″ is a hand pulley attached rigidly to the extension of said screw shaft H.

R and R′ are bands operated by any suitable machinery, not shown in the drawings.

S is the shifting device for shifting the band R, and K is a shifting device for shifting the band R′, the band R′

being crossed so as to give the reverse motion to the screw shaft H, when said band is shifted upon the stationary pulley P″.

T is a frame work provided with a screw threaded nut C engaging with the screw thread on H. The frame T supports the plate E′ and also the pins F and F′.

The operation of my invention is as follows:

July 30–06 When the band ~~wheel~~ R′ is acting upon the band pulley P″ the screw shaft H is turned in proper direction to convey the frame T to the right, as shown in the drawings until the [236] arm E comes in contact with the stationary stop D′, thereby shifting the positions of the pins or hooks F and F′ in the candy. At this point a band R′ is moved on to the idler pulley and the band R upon the stationary pulley P″, and the motion of the frame T is reversed until the arm E comes in contact with the stationary trip D, again reversing the positions of the pins F and F′. Or, in other words, returning them to normal positions, thus the frame T with the parts thereto attached, is given a reciprocating motion through the batch of candy supported by the receptacle B.

I have illustrated and described band pulleys and a screw threaded shaft as the means for operating the candy hooks within the receptacle which holds the batch of candy, but any other suitable means may be used.

I have also shown in the drawings, a trough for supporting the candy, but any suitable support may be used, which has the capacity for supporting the candy while it is being operated upon, as hereinbefore described.

I have also illustrated and described a stationary hook or pin and two traveling shifting pins; but I do not wish to be understood as limiting my invention to such an arrangement, since my invention could be applied in a device where the candy hook moves back and forth, and where the pins or hooks, although having a shifting action, are relatively stationary. In either case, the

candy is acted upon in a manner and by means of the shifting hook along a path corresponding to what I term a figure eight.

I have also used the term "pins" and "hooks"; that is, I have made use of them, merely for the purpose of description, and while these terms were found in the claims, I desire to have them construed as embracing any form of device to perform the functions given by said pins or hooks. [237]

Believing myself, as I do, to be the first to invent a machine for pulling candy, comprising a hook and two shifting pins, I desire to claim the same in the broadest possible legal manner.

Having thus described my invention and its method of operation, I have not attempted to set forth all the forms in which it may be embodied, but what I claim is

~~FIRST~~. In a candy pulling machine in combination a series of pins or candy pulling members, and means for moving a part of said members in intersecting paths whereby the said members automatically feed and pull the candy.

SECOND. In a candy pulling machine in combination a series of pins or pulling members, automatically acting means for causing said members to feed the candy to each other and pull the same.

~~THIRD~~.[1] A candy pulling machine comprising a plurality of oppositely disposed candy hooks or supports, a candy puller, and means for producing a ~~the~~ specified relative in and out motion of these parts for the purpose set forth.

[238]

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HERBERT M. DICKINSON.

C. H. BURDICK.

H. A. BURDICK.

OATH.

State of Wisconsin,
County of Walworth,—ss.

Herbert M. Dickinson, the above-named petitioner, being duly sworn, deposes and says that he is a citizen of the United States, and resident of Grand Rapids, Kent county, Michigan, and that he verily believes himself to be the original, first, and sole inventor of the improvements in Candy-pulling Machines described and claimed in the annexed specification; that he does not know and do not believe that the same was ever known or used before his invention or discovery, or patented or described in any printed publication in any country before his invention or discovery thereof, or more than two years prior to this application, or in public use or on sale in the United States for more than two years prior to this application; and that no application for patent on said improvement has been filed by him or his representatives or assigns in any foreign country.

HERBERT M. DICKINSON.

Sworn and subscribed to before me this 23 day of October, 1901.

[Seal]

C. H. BURDICK,
Notary Public, Wis.

My commission expires June 18, 1905.

[Endorsed on Back]:
Serial No. 81277—Paper No.
Application
Filed November 5, 1901.
H. M. Dickinson.
MAIL ROOM.
Nov. 5, 1901.
U. S. PATENT OFFICE.

[239]

DEPARTMENT OF THE INTERIOR,
United States Patent Office,
WASHINGTON.
MAILED Nov. 18, 1901.
" " "
DIVISION 15.

Herbert M. Dickinson,
Grand Rapids, Michigan.

Please find below a communication from the EXAMINER in charge of your application Serial No. 81,277, filed Nov. 5, 1901, for Candy Pulling Machine.

F. I. ALLEN,
Commissioner of Patents.

Applicant is advised that in an interference about to be declared between sundry application, among which this case will be included, your attorney of record and associate attorney are also attorneys for D. H. Brenner, of Grand Rapids, Michigan, likewise a party to this prospective interference.

CAMPBELL,
G. Examiner.

[Endorsed on Back]:
Serial No. 81,277—Paper No. 1.
Letter Dated Nov. 18, 1901.
H. M. Dickinson. [240]

M. A. M.

DEPARTMENT OF THE INTERIOR.
United States Patent Office.
WASHINGTON, D. C.,
November 18, 1901.
MAILED " " "
Division 15.

Herbert M. Dickinson,
c/o James L. Norris,
Washington, D. C.

Please find below a communication from the EXAMINER in charge of your application of Serial No. 81,277, filed Nov. 5, 1901, for Candy Pulling Machine.

F. I. ALLEN,
Commissioner of Patents.

Applicant is advised that he is entitled to make, and should present the following claims, which are those embodied in another pending application, and which when filed will be placed in interference with said pending case:

In a candy-pulling machine the combination of a stationary candy pin, a set of candy hooks and means for moving and shifting one of said hooks in relation to the other, substantially as described.

In combination with a stationary candy pin, a pair of candy hooks, a suitable frame for giving a reciprocating motion of the said candy hooks, a shifting piece carrying said candy hooks, and suitable means for shifting the position of such candy hooks, at or near the end of each stroke substantially as described.

In combination with a candy receptacle, a reciprocating frame, a shifting piece carried by the reciprocating frame, candy hooks carried by said shifting piece, a stationary candy pin within the said receptacle, trips for shifting said shifting piece as it is reciprocated from end to end of the candy receptacle, and suitable means for giving the reciprocating motion to the sliding frame and the shifting piece, substantially as described.

In combination with a candy receptacle a stationary pin therein, a reciprocating sliding frame, a shifting piece carried by the sliding frame, a trip arm upon said shifting piece, a stationary trip at either end of the said candy receptacle, said stationary trips adapted to turn the shifting piece upon its pivot and thereby shifting the candy hooks carried thereby, substantially as described.

CAMPBELL,
Examiner.

[Endorsed on back]:
Serial No. 81,277—Paper No. 2.
Letter Dated Nov. 18, 1901.
H. M. Dickinson. [241]

3–A.

IN THE UNITED STATES PATENT OFFICE.

In the Matter of the Application of HERBERT M. DICKINSON for Letters Patent for Improvement in CANDY-PULLING MACHINES.

Filed Nov. 5, 1901. Serial No. 81,277—Room No. 207.

Washington, D. C., Nov. 19, 1901.

Hon. Commissioner of Patents:

Sir: Add the following claims:

A 42. In a candy pulling machine the combination of a stationary candy pin, a set of candy hooks and means for moving and shifting one of said hooks in relation to the other, substantially as described.

~~53~~. In combination with a stationary candy pin, a pair of candy hooks, a suitable frame for giving a reciprocating motion to said candy hooks, a shifting piece carrying said candy hooks, and suitable means for shifting the position of such candy hooks at or near the end of each stroke, substantially as described.

~~64~~. In combination with a candy receptacle, a reciprocating frame, a shifting piece carried by the reciprocating frame, candy hooks carried by said shifting piece, a stationary candy pin within the said receptacle, trips

for shifting said shifting piece as it is reciprocated from end to end of the candy receptacle, and suitable means for giving the reciprocating motion to the sliding frame and the shifting [242] piece, substantially as described.

~~7~~5. In combination with a candy receptacle a stationary pin therein, a recriprocating sliding frame, a shifting piece carried by the sliding frame, a trip arm upon said shifting piece, a stationary trip at either end of the said candy receptacle, said stationary trips adapted to turn the shifting piece upon its pivot and thereby shifting the candy hooks carried thereby, substantially as described.

Insert
B
July 30–06

The foregoing claims are entered of record for interference purposes and are those contained in office letter dated November 18, 1901.

Respectfully,
JAS. L. NORRIS,
Atty. for H. M. Dickinson.

[Endorsed on back]:
Serial No. 81,277—Paper No. 3.
Amend't A.
Filed Nov. 19, 1901.
H. M. Dickinson.
U. S. Patent Office.
Filed Nov. 19, 1901, Division XV. [243]

December, 1901.

DEPARTMENT OF THE INTERIOR.
United States Patent Office.
WASHINGTON, D. C.

Copy sent to Assignee.

Dec. 17, 1901.
MAILED " " "

Herbert M. Dickinson,
c/o James L. Norris,
Washington, D. C. 21523.

Please find below a copy of a communication from the Examiner concerning your application for patent for "Candy Pulling Machine" filed Nov. 5, 1901, Serial No. 81,277.

Very respectfully,
F. I. ALLEN,
Commissioner of Patents.

Room No. 207.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the Rules.

The statement demanded by Rule 110 must be sealed up and filed on or before the 7th day of January, 1902, with the subject of the invention, and name of party filing it, indorsed on the envelope. The subject-matter involved in the interference is

(1) In a candy pulling machine in combination a series of pins or candy pulling members and means for moving a part of said members in intersecting paths whereby the said members automatically feed and pull the candy.

(2) In a candy pulling machine in combination a series of pins or pulling members, and automatically acting means for causing said members to feed the candy to each other and pull the same.

(3) A candy pulling machine comprising a plurality of oppositely disposed candy hooks or supports, a candy puller, and means for producing a specified relative in and out motion of these parts for the purpose specified. [244]

The counts are claims 1, 2, and 3 of the application of David H. Brenner of Grand Rapids, Mich., Edward Taggart of Grand Rapids, Mich., Attorney, James L. Norris of Washington, D. C., Associate Attorney; claims 1, 2, and 11 of the application of Chas. Thibodeau of Somerville, Mass., Wright, Brown & Quinby of No. 53 State street, Boston, Mass., Attorneys; claims 2, 3, and 1 of the application of Herbert L. Hildreth of Boston, Mass., Alex P. Browne of No. 31 State street, Boston, Mass., attorney, Watson & Watson of Washington, D. C., Associate attorneys, and claims 1, 2, and 3 of your application.

CAMPBELL,
Examiner.

[Endorsed on back]:
Serial No. 81,277—Paper No. 4.
Intf. Letter.
Dec. 17, 1901.
H. M. Dickinson. [245]

December 7, 1901.
Copy sent to Assignee.

DEPARTMENT OF THE INTERIOR.
United States Patent Office.
WASHINGTON, D. C.

U. S. Patent Office.
Dec. 17, 1901.
MAILED.
Dec. 17, 1901.

Herbert M. Dickinson,
c/o James L. Norris,
Washington, D. C.

21524

Please find below a copy of a communication from the

Examiner concerning the application for a patent for Candy Pulling Machines, filed Nov. 5, 1901, Serial No. 81,277.

Very respectfully,
F. I. ALLEN,
Commissioner of Patents.

Room No. 207.
Address only
The Commissioner of Patents,
Washington, D. C.

The case above referred to is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the Rules.

The statement demanded by Rule 110 must be sealed up and filed on or before 7th day of January, 1902, with the subject of the invention, and name of party filing it, indorsed on the envelope. The subject matter involved in the interference is

"1. In a candy pulling machine the combination of a stationary candy pin, a set of candy hooks and means for moving and shifting one of said hooks in relation to the other.

"2. In a combination with a stationary candy pin, a pair of candy hooks, a suitable frame for giving a reciprocating motion to the said candy hooks, a shifting piece carrying said candy hooks, and suitable means for shifting the position of such candy hooks at or near the end of each stroke. [246]

"3. In combination with a candy receptacle, a reciprocating frame, a shifting piece carried by the reciprocating frame, candy hooks carried by said shifting piece, a stationary candy pin within the said receptacle, trips for shifting said shifting piece as it is reciprocated from end to end of the candy receptacle, and suitable means for giving the reciprocating motion to the sliding frame and the shifting piece.

"4. In combination with a candy receptacle a stationary pin therein, a reciprocating sliding frame, a shifting piece carried by the sliding frame, a trip arm upon said shifting piece, a stationary trip at either end of the said candy receptacle, said stationary trips adapted to turn the shifting piece upon its pivot and thereby shifting the candy hooks carried thereby."

The counts are claims 4, 5, 6, and 7 of your application, and claims 4, 5, 6, and 7 of the application of David H. Brenner of Grand Rapids, Michigan, whose attorney is Edw. Taggart of Grand Rapids, Michigan, associate attorney, James L. Norris, of Washington, D. C.

CAMPBELL,
Examiner.

Serial No. 81,277—Paper No. 5.
Intf. Letter.
Dated Dec. 17, 1901.
H. M. Dickinson. [247]

INTERFERENCE CARD.

Paper No. 6.

Interference No. 21524.
Name, Herbert M. Dickinson.
Serial No. 81277.
Title, Candy Pulling Machine.
Filed, Nov. 5, 1901.
Interference with D. H. Brenner.
S. No. 75,423, Filed Sept. 14, 1901.

DECISIONS OF

Primary Examiner ———.	Dated, December 17, 1901.
Ex'r of Interferences ———.	Dated, April 3, 1902.
Board ———.	Dated, ———.
Commissioner ———.	Dated, ———.

REMARKS:

Decided in favor of Dickinson on concession.

Appeal waived. [248]

Forwarded from Division XV, Nov. 5. Intf. "B."

Copy sent assignees. Paper No. 7.

UNITED STATES PATENT OFFICE.
WASHINGTON, D. C.

Nov. 11, 1902.

MAILED " " "

No. 21,523.

In re Interference.

DICKINSON

v.

THIBODEAU

v.

HILDRETH.

Candy Pulling Machine.

Please find below a communication from the Primary Examiner in regard to the above-entitled case. 21523.

Very respectfully,

F. I. ALLEN,

Commissioner of Patents.

H. M. Dickinson,
c/o Jas. L. Norris,
Washington, D. C.

In the above-entitled interference the application of Edward M. Robinson & Jacob H. Deiter, of Lancaster, Pa., for "Candy Pulling Machine," Wm. R. Gerhart, #34 N. Duke street, Lancaster, Pa., attorney, has been added.

Claim 2 of Robinson & Deiter has been added to the issue, which is count 3 of the above interference.

Count 2 of said interference has been dissolved.

Robinson & Deiter have been given until Dec. 2/02, to file the preliminary statements demanded by Rule 110.

The preliminary statements filed by Dickinson are accepted herein.

CAMPBELL,
Examiner, Div. XV. [249]

Forwarded from Div. XV.
Feb. 11, 1903.

DEPARTMENT OF THE INTERIOR.
United States Patent Office.
WASHINGTON.

Copy sent Assignees.

Feb. 17, 1903.
MAILED " " "

Herbert M. Dickinson,
Care James L. Norris,
Washington, D. C.

Please find below a communication from the EXAMINER in charge of your application filed Nov. 5, 1901, Serial No. 81,277, "Candy-pulling Machine." 21,523.

F. I. ALLEN,
Commissioner of Patents.

On Dec. 16, 1902, the interference in which this application is involved was suspended for the purpose of adding a new party thereto. The new party added is Edw. J. Jenner of San Antonio, Texas, "Candy-pulling Machine," Alex. P. Browne, Boston, Mass., Atty., Watson & Watson, Washington, D. C., Assoc. Attys.

The issue remains the same and includes claim 3 of the new party.

Jenner has been given until 24 Mar. 1903, to file the preliminary statement demanded by Rule 110.

Edward A. Kitzmiller and Robert P. Duff of Pittsburg, Pa., are assignees of Dickinson.

H. L. Hildreth of Boston, Mass., is the assignee of Jenner.

CAMPBELL,
Examiner, Div. XV. [250]

Serial No. 81277—Paper No. 9.
Assoc. Pow. of Atty.
U. S. PATENT OFFICE.
FILED
JUN. 1, 1905.
Division XV.

EXAMINER'S ROOM No. ——.

Grand Rapids, Mich., May 29, 1905.

Hon. Commissioner of Patents,
Washington, D. C.

Sir:

Please recognize JOHN C. PENNIE of Washington, D. C., as my associate in the matter of the —— application of Herbert M. Dickinson for Letters Patent for Candy Pulling Machine, filed Nov. 5, 1901, Serial No. 81,277.

Very respectfully,
EDWARD TAGGART,
Attorney for Applicant. [251]

Mem.

Serial No. 81,277—Paper No. 10.
Dickinson.
Priority Awarded Dickinson by Court April 4–05.
Int'f No. 21,523. [252]

No. 11.

All communications respecting this application should give the serial number date of filing, and title of invention.

DEPARTMENT OF THE INTERIOR.
United States Patent Office.
WASHINGTON.

GDJ.

July 13, 1905.
MAILED " " "

Herbert M. Dickinson,
c/o John C. Pennie,
City.

Please find a communication from the EXAMINER in charge of your application Ser. No. 81,277, filed Nov. 5, 1901, for Candy Pulling Machine.

F. I. ALLEN,
Commissioner of Patents.

Claim 1 is rejected under rule 132 (Intf. No. 21,523). Claim 2 is not patentable over Fircheau, #511,011, Dec. 19, 1893, (107–36): See decision of Prin. Examiner paper No. 31, Intf. No. 21,523. Claims 3 to 7 are allowed.

CHAS. C. STAUFFER,
Examiner.

H. C. W. [253]

U. S. PATENT OFFICE.
FILED
JUL. 12, 1906.
DIVISION XV.
Serial No. 81,277—Paper No. 12.
Amend't.

IN THE UNITED STATES PATENT OFFICE.

Application of HERBERT M. DICKINSON.
Serial Number 81,277.
Filed November 5, 1901.
CANDY PULLING MACHINE.

Honorable Commissioner of Patents:
Sir:

Cancel Claims 1 and 2

In Claim 3, line 3 for "the" before "specified" substitute "/a/."

Renumber the remaining claims.

REMARKS:

By the accompanying amendment I have cancelled the claims rejected, and have amended Claim 3, so as to make it correspond to the phraseology of the interference issue, which, according to my files, reads in accordance with the amendment proposed.

In view of the pending interference between the application of this applicant, Serial Number 248,765, filed March 6, 1905, entitled Dickinson against Hildreth, it is probable that the actual allowance of the present application should be postponed pending the final determination of said interference. Both applications are based upon the same structure, and it is probable that it would be of advantage ultimately to issue all of the claims in a single application. For [254] this reason I suggest a suspension of the final issuance of the present application, if it is otherwise ready for allowance pending the final

determination of the interference referred to.

Respectfully,

JOHN C. PENNIE,

Associate Attorney. [255]

Room 308.

U. S. PATENT OFFICE
FILED
JUL. 30, 1906.
DIVISION XV.

Serial No. 81277 Paper No. 13
Amend't B.

UNITED STATES PATENT OFFICE.

HERBERT M. DICKINSON.

Filed November 5, 1901.

Serial No. 81,277.

CANDY PULLING MACHINES.

Hon. Commissioner of Patents.

Sir: In the matter of the above-entitled application, we hereby amend as follows:

Page 1, line 6, cancel "of" before "pins or hooks."

Page 1, line 9, cancel "with–" and substitute /"within."/

Page 2, line 20, erase "sample" and substitute therefor /"example."/

Page 3, line 10, cancel "wheel" after "band."

Add the following claims to those already in the case:

B

6. In a candy pulling machine, the combination of means for stretching or pulling the candy, and means for lapping the stretched candy upon itself.

combination of

7. In a candy pulling machine the / means for stretching or pulling the candy, means for lapping the stretched candy, and means for moving said stretching and lapping means in intersecting paths.

8. In a candy pulling machine the combination of means for stretching or pulling the candy, means for lapping the stretched candy, and means for producing a relative in and out motion of said stretching and lapping means. [256]

9. A candy pulling machine having candy pulling members and means for moving said members in intersecting paths, whereby the said members automatically feed and pull the candy.

10. In a candy pulling machine, in combination, a series of pins or candy pulling members, and means for moving a part of said members in intersecting paths, whereby the said members automatically feed and pull the candy.

11. In a candy pulling machine, in combination, a series of more than two pins or pulling members, and automatically acting means for causing said members to feed the candy to each other and pull the same.

12. In a candy pulling machine, the combination of a series of more than two pins or candy carrying and pulling members, and mechanism for moving said members relative to one another in such a manner as to carry the strands of candy produced by one movement of said members and hold the same across the path of motion to be followed by another of said members in its further movement.

13. In a candy pulling machine, the combination of a series of more than two pins or candy carrying and pulling members, and mechanism for moving a part of said members relatively to others of said members in such a manner as to produce a strand of candy and carry and hold the same in a position to be intersected by another of said members in the further relative movement thereof.

14. In a candy pulling machine, the combination of a pulling member, a plurality of co-operating pins or hooks, and mechanism for producing relative movement between

said member and pins or hooks relatively to one another in a manner to automatically feed the candy to each other and pull the same.

15. In a candy pulling machine, in combination, a series of more than two candy carrying and pulling members, means for increasing the distance between one and another of such [257] members and for returning the same to their original relative positions, and means for carrying the strand of candy produced by one moving member to a position across the path of motion to be followed by another moving member.

16. In a candy pulling machine, the combination of a plurality of candy carrying and pulling members, and mechanism for moving said members toward and from each other and alternately therewith varying their relative positions so as to carry the strands of candy produced by one movement of said members to a position across the path of motion to be followed by one of said members in the further movement thereof.

17. In a candy pulling machine, the combination of a plurality of oppositely disposed candy pulling members, and automatically acting mechanism for moving said members alternately away from and toward each other and alternately therewith changing the relative positions of some of said members.

18. In a candy pulling machine, the combination of oppositely disposed pulling members, one of which carries a plurality of pins or hooks, and mechanism for alternately increasing and decreasing the distance between said members and for shifting said pins relatively to each other during the movements of said members.

19. In a candy pulling machine, the combination of a stationary pulling member, a plurality of movable pulling members, and mechanism for moving said movable members relatively to the stationary member and to each other, whereby the said members automatically feed and pull the candy.

20. In a candy pulling machine, the combination of an oscillating arm carrying a pair of candy pulling members, a co-operating pulling member and mechanism for causing relative rectilinear movements of said arm and last named member, and for alternately therewith imparting oscillatory movement to said arm. [258]

REMARKS:

We have just been notified by the office that the divisional application, Serial No. 248,765, has been returned to the Primary Examiner, the interference between Dickinson and Hildreth having been terminated by the concession of priority filed by Hildreth. We are accordingly amending this application by the addition to it of the claims which were the issues of the interference No. 25,510, Dickinson v. Hildreth, also by the addition of the two claims which were in the Dickinson divisional application, but were not in the interference.

We have amended the specification to correct three obvious typographical errors, but have otherwise left the specification in its original form. We have not amended the specification by adding to it the additional matter contained in the specification of the divisional application, because we believe that the original specification is complete so far as its description of the construction and mechanical operation of the machine embodying the invention is concerned. In view of the sufficiency of the description contained in the original application, it has not been thought necessary to introduce a discussion of the theory of the operation of the machine into the specification.

We believe that the present amendment puts the application into condition for immediate allowance and issue. In view of the peculiar conditions, an early and

favorable action on the case is requested.

Respectfully,
HERBERT M. DICKINSON,
By JOHN C. PENNIE,
Associate Attorney.

Washington, D. C., July 30, 1906. [259]

F. B. A.

DEPARTMENT OF THE INTERIOR.
United States Patent Office.
WASHINGTON.
MAILED, August 4, 1906.
" " "

Herbert M. Dickinson,
c/o John C. Pennie, Asso.
Washington, D. C.

Please find below a communication from the EXAMINER in charge of your application No. 81,277, filed Nov. 5, 1901, for Candy Pulling Machine.

F. I. ALLEN,
Commissioner of Patents.

This case has been considered as amended July 12, and July 30, 1906.

Attention is called to the fact that a new drawing is required in this case, the present drawing having been held informal because of lack of space for heading.

CHAS. C. STAUFFER,
Examiner. [260]

DEPARTMENT OF THE INTERIOR.
United States Patent Office.
WASHINGTON.
Aug. 13, 1906.

Herbert M. Dickinson,
c/o John C. Pennie,
Washington, D. C.

Please find below a communication from the EXAM-

INER in charge of your application #81,277, filed November 5, 1901, for Candy Pulling Machine.

F. I. ALLEN,
Commissioner of Patents.

This is supplemental to Office letter of August 4, 1906.

Careful scrutiny of the drawing now on file in the light of the description disclosed several inaccuracies which require correction. The points in question are as follows:

1st. Absence of "shifting device" on belt R.'

2d. Crossing of belt R, instead of belt R' as recited in the specification.

3d. Absence of operative connection between the shift bar and the stop pins supposed to be on same. (Fig. 1).

4th. Absence of operative connection between nut C and "frame" T.

5th. Inoperativeness in Fig. 3 by reason of fact that both belts are shown on loose pulleys.

6th. Representation of "frame" T (Fig. 3) in heavy lines instead of outlines. [261]

It is also noted that according to the specification "Fig. 3 shows a detailed view of the screw threaded shaft." This is not strictly correct since the figure is much more pretentious.

Proper amendment to the specification in this particular is in order.

CHAS. C. STAUFFER.

M. [262]

Room 308.

U. S. PATENT OFFICE
FILED
AUG. 21, 1906.
DIVISION XV.

Serial No. 81277—Paper No. 16.
Amend't C.

UNITED STATES PATENT OFFICE.

HERBERT M. DICKINSON.
Filed November 5, 1901.
Serial No. 81,277.
CANDY PULLING MACHINE.

Hon. Commissioner of Patents.

Sir: In the matter of the above-entitled application, we hereby amend as follows:

Cancel the last line of page 1 and the first line of page 2, and substitute /"Fig 3 shows a vertical longitudinal 'section of the machine."

C

Cancel the sheet of drawing in the case and substitute the new sheet submitted herewith.

The above amendments are in compliance with the Examiner's requirements of August 4th and 13th, and, it is believed, place the application in condition for allowance.

Respectfully submitted,
HERBERT M. DICKINSON,
By JOHN C. PENNIE,
Associate Attorney. [263]

No. 831,501. PATENTED SEPT. 18, 1906.

H. M. DICKINSON.

CANDY PULLING MACHINE.

APPLICATION FILED NOV. 6, 1901.

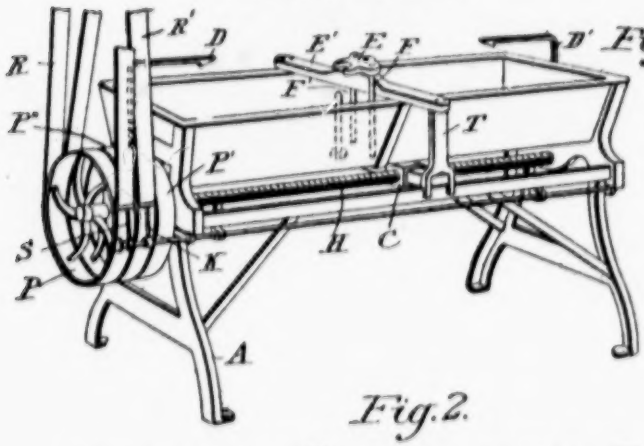


Fig. 1.

Fig. 2.

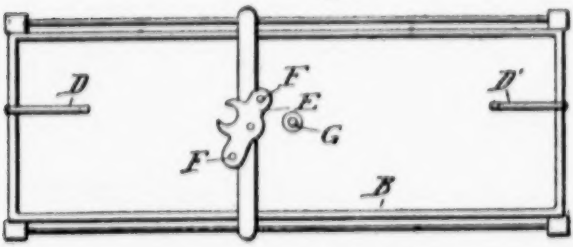
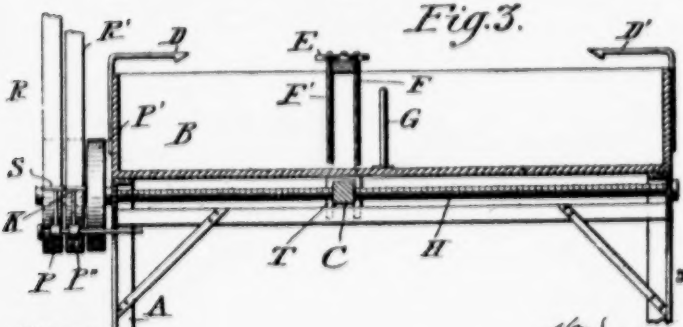


Fig. 3.



Witnesses
D. D. Fedeler.
F. E. Hutchinson Jr.

Inventor
H. M. Dickinson.
By John C. Clemmer
Asst. Atty

UNITED STATES PATENT OFFICE.

HERBERT M. DICKINSON, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO HERBERT L. HILDRETH, OF BOSTON, MASSACHUSETTS.

CANDY-PULLING MACHINE.

No. 831,501. Specification of Letters Patent. Patented Sept. 18, 1906.

Application filed November 8, 1901. Serial No. 81,377.

To all whom it may concern:

Be it known that I, HERBERT M. DICKINSON, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented new and useful Improvements in Candy-Pulling Machines, of which the following is a specification.

This application refers to a machine designed for the pulling of candy, and is adapted to mechanically pull candy so as to produce the same or better results than are usually produced by hand-pulling.

The invention consists in combining with a trough or suitable receptacle for supporting the candy to be operated upon pins or hooks adapted to travel within the said receptacle and to be shifted in the course of their travel so as to pull all portions of the candy placed within the receptacle; also, to combine with a series of pin or hooks suitable means for operating the same, substantially as hereinafter described.

The objects of my invention are, first, to provide a machine which mechanically pulls candy in order to produce the same result as hand-pulling and in a better degree; second, to facilitate and cheapen the process of pulling candy; third, to furnish a machine for operation on the candy which will produce a superior article. These objects I accomplish by means of the structure particularly shown and illustrated in the accompanying drawings, in which—

Figure 1 shows a perspective view of a machine constructed in accordance with my invention. Fig. 2 shows a plan view of the trough or candy-support with the operating pins or hooks and trips in position. Fig. 3 shows a vertical longitudinal section of the machine.

A shows a framework, of any suitable material or form for supporting the trough and operating mechanism.

B shows the trough or receptacle supported on the framework, which said trough or receptacle may be made in any suitable form, the object of said trough being merely to receive and support the batch of candy to be operated upon.

C shows the screw-threaded nut, which engages with a reciprocating slide T for the purpose of giving a reciprocating motion of said slide and the movable pins or hooks.

D and D′ are stops, one at each end of the candy-receptacle, and are adapted to change the position of the pins F and F′ when brought in contact with the said stops, as hereinafter described.

E is the arm on the plate E′, which supports the pins F and F′.

F and F′ are pins carried by the plate E′ and are adapted to be turned when the arm E comes in contact with D or D′.

G is the stationary pin which, in the example of my invention shown in the drawings, is secured to the bottom of the candy-receptacle B.

P and P′ are idler-pulleys on an extension of the screw-shaft H.

P″ is a band-pulley attached rigidly to the extension of said screw-shaft H.

R and R′ are bands operated by any suitable machinery. (Not shown in the drawings.)

S is the shifting device for shifting the band R, and K is a shifting device for shifting the band R′, the band R′ being crossed so as to give the reverse motion to the screw-shaft H when said band is shifted upon the stationary pulley P″.

T is a framework provided with a screw-threaded nut C, engaging with the screw-thread on H. The frame T supports the plate E′ and also the pins F and F′.

The operation of my invention is as follows: When the band R′ is acting upon the band-pulley P″, the screw-shaft H is turned in proper direction to convey the frame T to the right, as shown in the drawings, until the arm E comes in contact with the stationary stop D′, thereby shifting the positions of the pins or hooks F and F′ in the candy. At this point a band R′ is moved onto the idler-pulley and the band R upon the stationary pulley P″ and the motion of the frame T is reversed until the arm E comes in contact with the stationary trip D, again reversing the positions of the pins F and F′ or, in other words, returning them to normal positions. Thus the frame T, with the parts thereto attached, is given a reciprocating motion through the batch of candy supported by the receptacle B.

I have illustrated and described band-pulleys and a screw-threaded shaft as the means for operating the candy-hooks within the receptacle which holds the batch of candy; but any other suitable means may be used. I have also shown in the drawings a trough for supporting the candy; but any suitable support may be used which has the capacity for supporting the candy while it is being operated upon, as hereinbefore described. I have also illustrated and described a stationary hook or pin and two traveling shifting pins; but I do not wish to be understood as limiting my invention to such an arrangement, since my invention could be applied in a device where the candy-hook moves back and forth and where the pins or hooks, although having a shifting action, are relatively stationary. In either case the candy is acted upon in a manner and by means of the shifting hook along a path corresponding to what I term a figure "8." I have also used the terms "pins" and "hooks"—that is, I have made use of them merely for the purpose of description—and while these terms were found in the claims I desire to have them construed as embracing any form of device to perform the functions given by said pins or hooks.

Believing myself, as I do, to be the first to invent a machine for pulling candy comprising a hook and two shifting pins, I desire to claim the same in the broadest possible legal manner.

Having thus described my invention and its method of operation, I have not attempted to set forth all the forms in which it may be embodied; but

What I claim is—

1. A candy-pulling machine comprising a plurality of oppositely-disposed candy hooks or supports, a candy-puller, and means for producing a specified relative in-and-out motion of these parts for the purpose set forth.

2. In a candy-pulling machine the combination of a stationary candy-pin, a set of candy-hooks and means for moving and shifting one of said hooks in relation to the other, substantially as described.

3. In combination with a stationary candy-pin, a pair of candy-hooks, a suitable frame for giving a reciprocating motion to the said candy-hooks, a shifting piece carrying said candy-hooks, and suitable means for shifting the position of such candy-hooks at or near the end of each stroke, substantially as described.

4. In combination with a candy-receptacle, a reciprocating frame, a shifting piece carried by the reciprocating frame, candy-hooks carried by said shifting piece, a stationary candy-pin within the said receptacle, trips for shifting said shifting piece as it is reciprocated from end to end of the candy-receptacle, and suitable means for giving the reciprocating motion to the sliding frame and the shifting piece, substantially as described.

5. In combination with a candy-receptacle a stationary pin therein, a reciprocating sliding frame, a shifting piece carried by the sliding frame, a trip-arm upon said shifting piece, a stationary trip at either end of the said candy-receptacle, said stationary trips adapted to turn the shifting piece upon its pivot and thereby shifting the candy-hooks carried thereby, substantially as described.

6. In a candy-pulling machine, the combination of means for stretching or pulling the candy, and means for lapping the stretched candy upon itself.

7. In a candy-pulling machine the combination of means for stretching or pulling the candy, means for lapping the stretched candy, and means for moving said stretching and lapping means in intersecting paths.

8. In a candy-pulling machine the combination of means for stretching or pulling the candy, means for lapping the stretched candy, and means for producing a relative in-and-out motion of said stretching and lapping means.

9. A candy-pulling machine having candy-pulling members and means for moving said members in intersecting paths, whereby the said members automatically feed and pull the candy.

10. In a candy-pulling machine, in combination, a series of pins or candy-pulling members, and means for moving a part of said members in intersecting paths, whereby the said members automatically feed and pull the candy.

11. In a candy-pulling machine, in combination, a series of more than two pins or pulling members, and automatically-acting means for causing said members to feed the candy to each other and pull the same.

12. In a candy-pulling machine, the combination of a series of more than two pins or candy carrying and pulling members, and mechanism for moving said members relative to one another in such a manner as to carry the strands of candy produced by one movement of said members and hold the same across the path of motion to be followed by another of said members in its further movement.

13. In a candy-pulling machine, the combination of a series of more than two pins or candy carrying and pulling members, and mechanism for moving a part of said members relatively to others of said members in such a manner as to produce a strand of candy and carry and hold the same in a position to be intersected by another of said members in the further relative movement thereof.

14. In a candy-pulling machine, the com-

bination of a pulling member, a plurality of coöperating pins or hooks, and mechanism for producing relative movement between said member and pins or hooks relatively to one another in a manner to automatically feed the candy to each other and pull the same.

15. In a candy-pulling machine, in combination, a series of more than two candy carrying and pulling members, means for increasing the distance between one and another of such members and for returning the same to their original relative positions, and means for carrying the strand of candy produced by one moving member to a position across the path of motion to be followed by another moving member.

16. In a candy-pulling machine, the combination of a plurality of candy carrying and pulling members, and mechanism for moving said members toward and from each other and alternately therewith varying their relative positions so as to carry the strands of candy produced by one movement of said members to a position across the path of motion to be followed by one of said members in the further movement thereof.

17. In a candy-pulling machine, the combination of a plurality of oppositely-disposed candy-pulling members, and automatically-acting mechanism for moving said members alternately away from and toward each other and alternately therewith changing the relative positions of some of said members.

18. In a candy-pulling machine, the combination of oppositely-disposed pulling members, one of which carries a plurality of pins or hooks, and mechanism for alternately increasing and decreasing the distance between said members and for shifting said pins relatively to each other during the movements of said members.

19. In a candy-pulling machine, the combination of a stationary pulling member, a plurality of movable pulling members, and mechanism for moving said movable members relatively to the stationary member and to each other, whereby the said members automatically feed and pull the candy.

20. In a candy-pulling machine, the combination of an oscillating arm carrying a pair of candy-pulling members, a coöperating pulling member and mechanism for causing relative rectilinear movements of said arm and last-named member, and for alternately therewith imparting oscillatory movement to said arm.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HERBERT M. DICKINSON.

Witnesses:
C. H. BURDICK,
H. A. BURDICK.

107. Bread, Cracker & Lozenge Making Confectionery Machines.

CONTENTS:

Print for Intf. Nov. 12, 1901 ,and Dec. 4, 1901.
Application 1 papers O. K.
1. Letter Nov. 18, 1901.
2. Letter Nov. 18, 1901.
3. Amend't A Nov. 19, 1901.
4. Intf. letter "B" Dec. 17, 1901.
5. Intf. letter "C" " " "
6. Intf. Card Intf. No. 21524.
7. Intf. letter "B" Nov. 11, 1902.
8. Intf. letter Feb. 17, 1903.
9. Assoc. Pow. of Atty. June 1, 1905.
10. Priority awarded Dickinson by Court April 4–05.
11. Rejection July 13, 1905.
12. Amend't July 12/06.
13. Amend't B July 30, 1906.
14. Letter Aug. 4, 1906.
15. Supplemental Letter, Aug. 13, 1906.
16. Amend't C Aug. 21, 1906.

TITLE:

Improvement in Candy-pulling Machine.

Filed January 26, 1918. G. H. Marsh, Clerk. [267]

Plaintiff's Exhibit No. 14.

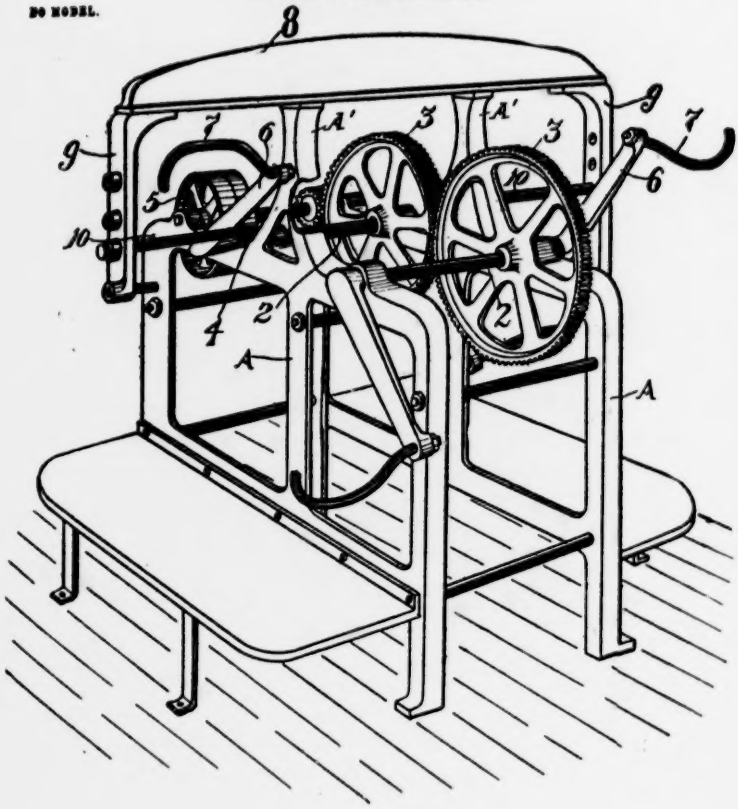
No. 731,681. PATENTED JUNE 23, 1903.

W. E. HENRY.

CANDY PULLING MACHINE.

APPLICATION FILED NOV. 24, 1902.

NO MODEL.



WITNESSES:

INVENTOR.

William E. Henry

BY

Dewey Stronghton.

ATTORNEYS.

No. 731,681. Patented June 23, 1903

UNITED STATES PATENT OFFICE.

WILLIAM EMIL HENRY, OF SAN FRANCISCO, CALIFORNIA.

CANDY-PULLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 731,681, dated June 23, 1903.

Application filed November 24, 1902. Serial No. 132,640. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM EMIL HENRY, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Candy-Pulling Machines; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a machine which is adapted for the pulling of candy, so as to work it into the proper condition during the manufacture.

My invention comprises details of construction which will be more fully explained by reference to the accompanying drawing, in which the figure is a perspective view of a candy-pulling machine embodying my invention.

For the purpose of preparing candy, after the syrup has been boiled to the proper consistency it is allowed to cool, so as to form a waxy and plastic mass of any desired size or weight. This mass, which is at first of a dark color, must be pulled continuously, so as to allow air to be mixed with it, and this gradually bleaches it and lightens it up and makes it fit for the class of candy which is to be made from the batch.

It is the object of my invention to provide a machine for rapidly and economically carrying out this pulling process.

As shown in the drawing, a frame A, of any suitable construction, has shafts 2 journaled transversely across it. Upon these shafts are fixed the intermeshing gear-wheels 3, so that both shafts turn in unison. Power is applied to drive these shafts in any suitable or desired manner. In the present case I have shown a shaft 4 parallel with the shafts 3 and having pulleys 5, through which power may be communicated to rotate the shaft by a belt, and upon this pulley-shaft is a pinion which engages the teeth of one of the gears 3, thus rotating it and its companion in unison.

Upon the outer ends of the shafts 2 are fixed crank 6, and these cranks have hooks 7 projecting from them, as shown. The frame A is extended up in the center, as shown at A', and across the top I have shown a transverse beam 8, from the outer ends of which depend the arms 9. From these arms bars 10 project inwardly at such points that the hooks 7 as they revolve just pass the bars 10 upon opposite sides and in such relation to each other that when the mass of candy is attached to the hooks it is thrown over the bar 10 as the hook approaches it from one side and is pulled outwardly by the hook as it recedes from this bar. Each hook thus engages the mass of candy and pulls it outward as it recedes from the bar 10, and the operation is thus continued until the mass has been sufficiently mixed with air and bleached to the desired degree. In order to regulate the amount of air which is mixed with the mass, the stationary arms 10 are movable up or down in the hangers 9, so as to stand nearer to the hooks 7 as they approach from above, as they are designed to travel, or farther away from them in this portion of the movement. By this construction I may use either one or two sets of pins and hooks. By having cranks and hooks fixed upon each end of the shafts 2 two batches of candy may be worked at the same time—one hard and the other soft or of varying degrees of consistency—without either in any way interfering with the operation of the other. By fixing the hooks upon the outer ends of the shafts I am enabled to attach or remove the batch of candy at any time without stopping the machine, and there is no danger of the operator becoming entangled with the machinery, because the hooks are entirely outside of the machinery, and the framework and the driving-gears being located within the frame the power is evenly distributed to both ends of the shafts.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a candy-pulling machine parallel shafts with intermeshing gears, cranks upon the outer ends of the shafts, and outwardly-extending hooks or arms thereon, fixed supports or hangers exterior to said hooks with pins projecting into the space between the pair of revolving cranks, and means by which said intermediate pins may be adjusted up or down.

In witness whereof I have hereunto set my hand.

WILLIAM EMIL HENRY.

Witnesses:
ROBT. R. PRAY,
E. J. CAMPODONICO.

[Endorsed]: Filed January 26, 1918. G. H. Marsh, Clerk.

Plaintiff's Exhibit No. 15.

No. 857,770. PATENTED JUNE 25, 1907.

C. THIBODEAU.

CANDY PULLING MACHINE.

APPLICATION FILED NOV. 26, 1906.

SHEETS—SHEET 1.

Fig. 1

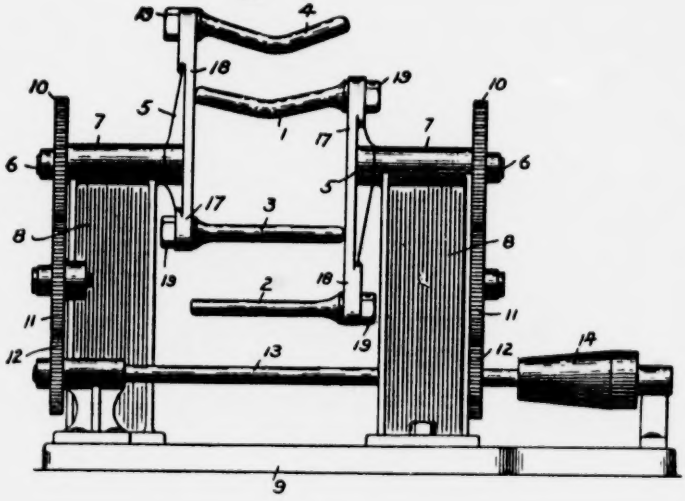
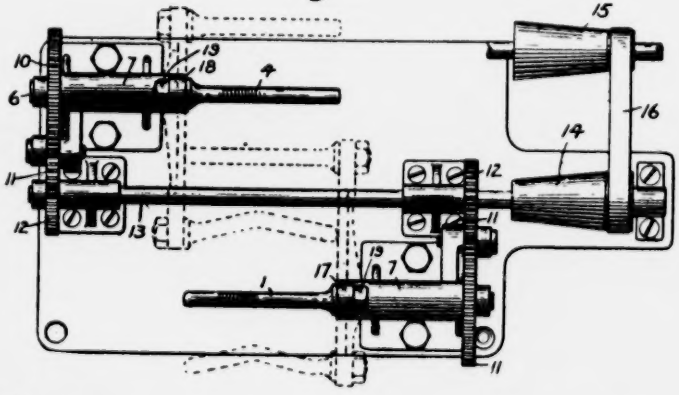


Fig. 2



Witnesses:
Walter E. Lombard
P. H. Poggetti.

Inventor:
Charles Thibodeau
by Wright, Brown & Quinby
Attys.

No. 857,770 PATENTED JUNE 25, 1907

C. THIBODEAU.

CANDY PULLING MACHINE.

APPLICATION FILED NOV. 26, 1900. 3 SHEETS—SHEET 1

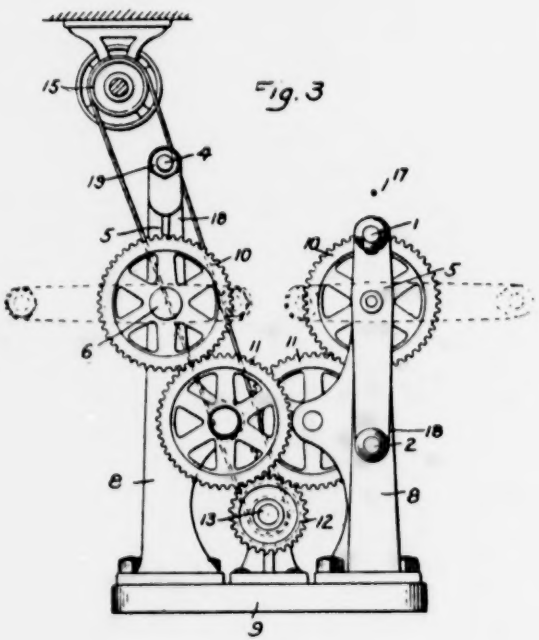


Fig. 3

Witnesses:
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D. H. Pezzetti

Inventor:
Charles Thibodeau
by Wright, Brown & Quinby
Attys.

No. 857,770. PATENTED JUNE 25, 1907.

C. THIBODEAU.

CANDY PULLING MACHINE.

APPLICATION FILED NOV. 26, 1900.

3 SHEETS—SHEET 3.

Fig. 4.

Fig. 5.

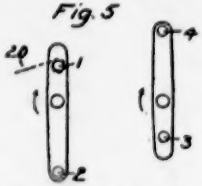


Fig. 6.

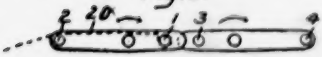


Fig. 7.

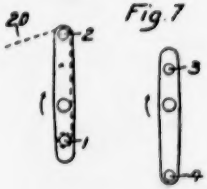


Fig. 8.

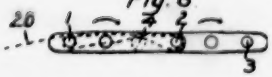


Fig. 9.

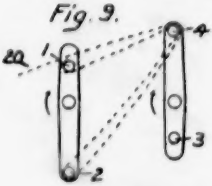


Fig. 10.

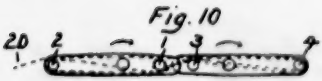


Fig. 11.

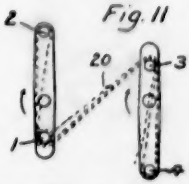


Fig. 12.

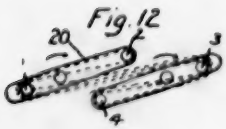
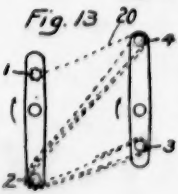


Fig. 13.



Witnesses

Walter E. Lombard

O. W. Bryseth

Inventor:

Charles Thibodeau

by Wright, Brown & Quinby

Atty's.

UNITED STATES PATENT OFFICE.

CHARLES THIBODEAU, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO EDWARD A. KITZMILLER, OF PITTSBURG, PENNSYLVANIA, AND ROBERT P. DUFF, OF SWISSVALE BOROUGH, PENNSYLVANIA, TRADING UNDER FIRM-NAME OF P. DUFF & SONS, OF PITTSBURG, PENNSYLVANIA.

CANDY-PULLING MACHINE.

No. 857,770. Specification of Letters Patent. Patented June 25, 1907.

Application filed November 26, 1900. Serial No. 37,734.

To all whom it may concern:

Be it known that I, CHARLES THIBODEAU, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Candy-Pulling Machines, of which the following is a specification.

This invention relates to a novel machine for pulling candy, such as molasses candy and other kinds, and it consists in certain novel features of construction and arrangement, fully described in the specification, clearly illustrated in the drawings and particularly pointed out in the claims.

Of the accompanying drawings, forming a part of this specification,—Figure 1 represents an end elevation of a candy-pulling machine constructed in accordance with my invention. Fig. 2 represents a plan view thereof. Fig. 3 represents a side elevation. Figs. 4 to 13, inclusive, represent diagrammatic views, showing different positions of the working parts of the machine.

The same reference characters indicate the same parts in all of the figures.

Referring to the drawings, which show an embodiment of my invention selected by me for the purpose of illustrating the invention, 1, 2, 3 and 4 represent four substantially parallel pins secured to levers 5, 5. The levers 5 are secured to the inner ends of two shafts 6, 6, which are journaled in bearings 7, 7 t the upper ends of standards 8, 8, said standards 8 8 being shown as mounted upon a base 9. Each shaft is provided with a gear 10, which meshes with an intermediate gear or idler 11, the latter in turn meshing with a gear 12. The two gears 12 are secured to a common drive-shaft 13, rotated in any suitable manner, as by means of cone-pulleys 14, 15, and a shifting belt 16, whereby different speeds of the said shaft may be obtained. By the described arrangement of shafts and gearing the levers 5, 5 are rotated in the same direction at an equal speed. Each lever has a short arm 17, and a long arm 18, at the ends of which arms the pins 1, 2, 3 and 4 are affixed. The said pins are thus located at unequal distances from their axes of revolution, the pins 1, 3 on the short arms 17 being located nearer to the shafts 6, 6 than the pins 2, 4 on the longer arms 18.

The pins 1, 2, 3 and 4 and their supporting shafts 6 are so related that the circles described by the pins 1 and 3, which are nearest the shafts 6, 6 do not intersect, while the circles described by the pins 2, 4, which are farthest away from the shafts 6, 6 intersect each other. The result of this construction is a novel action, the successive stages of which are represented in Figs. 4 to 13. Figs. 4 to 11 show the positions of the parts at quarter turns of the shafts 6, 6. Fig. 12 shows their positions at slightly less than a quarter turn from the positions shown in Fig. 11. Fig. 13 shows the positions at slightly more than a quarter turn from the positions shown in Fig. 12.

Let it be assumed that an elongated rope or batch 20 of candy has been attached to the pin 1, when the pins are all in one plane and the pins 2, 4 on the long arms of the levers have crossed each other's paths; a quarter turn of the shafts will bring the parts to the position represented in Fig. 5; another quarter turn causes the rope of candy to overlie the pin 2 of the same set as pin 1, as shown in Fig. 6; another quarter turn bends the rope 20 over pin 2, as shown in Fig. 7; another quarter turn causes the rope to be doubled on the pins 1, 2, and brings the pin 4 of the set on the other bracket underneath the doubled strands, as illustrated in Fig. 8; the next quarter turn brings the parts to the position represented in Fig. 9, in which the doubled rope supported by the pins 1, 2 has been pulled out or stretched into a loop by the pin 4. The next quarter turn brings the pins 1, 3 on the short arms adjacent to each other, with the pin 3 about to come into action, as shown in Fig. 10. It may be assumed that the feeding of the rope of candy is then discontinued and the machine has received its full quota. In the next quarter turn the pins 1, 3 draw away from each other and pull or stretch out the candy between them. In Fig. 12, which shows the parts just before the completion of the next quarter turn, the pins 2, 4 on the long arms are crossing each other's paths, and the candy, which is already in quadruple strands, is about to be doubled again on each set of pins. After the pins have come into the same plane, the next quarter turn brings them into the position shown in Fig. 13, in which both the pins 2 and 4 are exerting the action which the pin 4 is exert-

ing in Fig. 9. The next quarter turn brings the parts again to the positions shown in Fig. 10, and the subsequent pulling is a repetition of the action shown in Figs. 10, 11, 12 and 13. The operation of my improved machine, therefore, causes the candy to be quickly and uniformly stretched out by the pins, which act as pullers. One pin in each set, as the pins 1 and 4 in the drawings, may be bent or bowed toward their axes of revolution, in order to keep the candy centered on the rods. In the operation of the machine the candy is not necessarily wound on the pins successively, as shown in Figs. 4 to 10, this method being selected merely to clearly illustrate the action of the machine. The candy may be applied to the machine in any suitable manner. For instance, when the parts have the positions represented in Fig. 6, the pins 1 and 3 being adjacent, a batch of candy may be wrapped around or molded on said pins 1 and 3 and the machine then started, whereupon, the action illustrated in Figs. 10 to 13 will soon ensue and be continuously repeated. In starting to work a batch of candy, the machine is preferably run slowly at first, and its speed gradually increased until the normal working speed has been attained.

In the operation of the machine the candy is alternately and automatically fed to the pins (see Figs. 9 and 12), then pulled (see Figs. 8 and 13), and then re-fed and re-pulled repeatedly, this operation continuing until the candy has been pulled to the desired extent. In feeding the candy to each other the revolving pins lap the same so that there is a continuous and alternate lapping and pulling or stretching of the mass. The pins move or revolve in vertical planes so that should the mass of candy stretch due to its weight it will be recovered and re-fed to the pins.

I do not confine myself to the exact construction shown, as various modifications may be made within the scope of the invention, which includes power-driven candy-pulling pins arranged to move in intersecting and non-intersecting paths, and to automatically feed and re-feed the candy to each other, and then pull and re-pull the fed and re-fed candy. In place of the pins, I may employ other forms of pulling members, and the levers and pins may be differently arranged and positioned, so long as they operate in the described way. The path of motion of the pins may, if desired, be made that of polygons other than circles.

While the means for moving a part of the pulling members in intersecting circles and a part in non-intersecting circles, and the means for automatically causing the pulling members to feed and pull the candy, comprise in the form shown, the two levers with their offset pins and the gearing by which the same are driven, yet said levers and their driving mechanism may be variously arranged and other forms of driving mechanism may be employed, if desired, without departing from the spirit and scope of my invention.

I claim:

1. In a candy pulling machine, the combination of a plurality of co-acting pulling members mounted for movement, some in intersecting paths, and others in non-intersecting paths.

2. In a candy-pulling machine, the combination of a plurality of co-acting sets of pins, said sets having pins mounted for movement, some in intersecting paths and others in non-intersecting paths.

3. In a candy pulling machine, the combination of a plurality of co-acting pulling members mounted to revolve, some in intersecting circles, and others in non-intersecting circles.

4. In a candy-pulling machine, the combination of a plurality of co-acting sets of pins, said sets having pins mounted to revolve, some in intersecting circles and others in non-intersecting circles.

5. In a candy pulling machine, the combination of two substantially parallel off-set rotary shafts each carrying co-acting pulling members, and means to rotate said shafts.

6. In a candy-pulling machine, the combination of two substantially parallel offset rotary shafts having co-acting pullers, and means to rotate said shafts in the same direction at equal speeds.

7. In a candy pulling machine, the combination of two substantially parallel off-set rotary shafts having co-acting sets of pulling members, said pulling members being mounted to revolve, some in intersecting circles, and others in non-intersecting circles.

8. In a candy-pulling machine, the combination of two substantially parallel offset rotary shafts having co-acting sets of pins, said pins being mounted to revolve, some in intersecting circles, and others in non-intersecting circles, and means to rotate said shafts in the same direction at equal speeds.

9. In a candy-pulling machine, the combination of a plurality of pins mounted for movement in substantially parallel relation to each other in intersecting paths.

10. In a candy pulling machine, the combination of a series of candy pulling members, and means for imparting to a part of said members continuous circular movement in one direction.

11. In a candy-pulling machine, the combination of a plurality of pins mounted to revolve in intersecting circles.

12. In a candy pulling machine, the combination of a plurality of pins mounted to revolve in intersecting circles and moving in the same direction and at equal angular speeds.

13. In a candy pulling machine, the com-

bination of a pulling member mounted to move in a circular path in one direction, and co-operating means movable to intersect the path of first named pulling member.

14. In a candy pulling machine, the combination of a pulling member mounted to move in a circular path in one direction, and a plurality of movable co-operating pulling members, one of which moves to intersect the path of said first named member.

15. In a candy pulling machine, the combination of a plurality of pulling members mounted to move in circular paths in one direction, and co-operating means movable to intersect the paths of one of said first named members.

16. In a candy pulling machine, the combination of a plurality of pulling members mounted to revolve in intersecting circles, and a member co-operating therewith.

17. In a candy pulling machine, the combination of a plurality of pulling members mounted to revolve in intersecting circles, and another member mounted to revolve in a circle and co-operating therewith.

18. In a candy-pulling machine, the combination of two substantially parallel offset shafts terminating short of each other, levers mounted on the adjacent ends of said shafts, and two pins mounted on each lever on opposite sides of its shaft-axis and projecting toward the opposite lever, said two pins being located at different distances from their shaft axes, the pins nearer the axis moving in non-intersecting paths, and those farther from the axis moving in intersecting paths.

19. In a candy-pulling machine, the combination of two substantially parallel offset shafts terminating short of each other, means for rotating said shafts in the same direction at equal speeds, levers mounted on the adjacent ends of said shafts, and two pins mounted on each lever on opposite sides of its shaft-axis and projecting toward the opposite lever, said two pins being located at different distances from their shaft-axis, the pins nearer the axis moving in non-intersecting paths, and those farther from the axis moving in intersecting paths.

In testimony whereof I have affixed my signature, in presence of two witnesses.

CHARLES THIBODEAU.

Witnesses:
A. D. HARRISON,
H. L. ROBBINS.

Filed January 26, 1918. G. H. Marsh, Clerk.

Plaintiff's Exhibit No. 16.

No. 804,726. PATENTED NOV. 14, 1905.

E. J. JENNER.

CANDY PULLING MACHINE.

APPLICATION FILED NOV. 13, 1905.

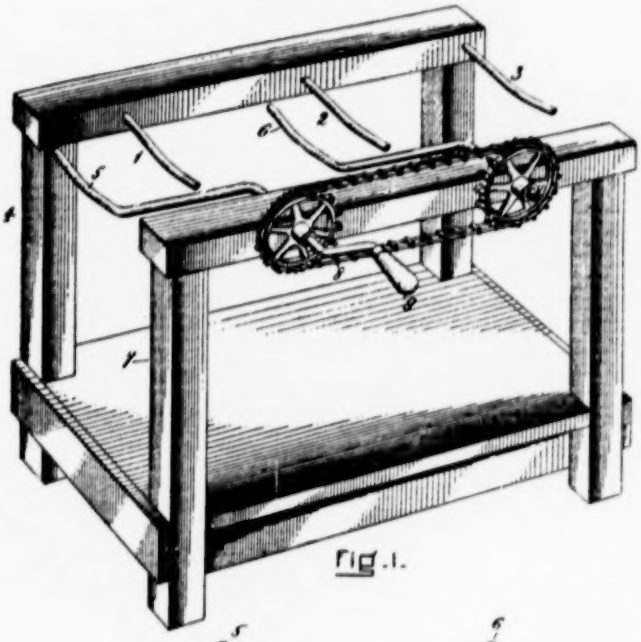


Fig. 1.

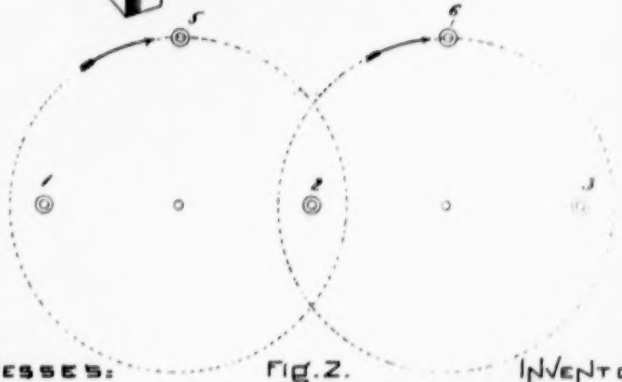


Fig. 2.

WITNESSES:

INVENTOR:

Edward J. Jenner
by Alex. P. Browne,
attorney

UNITED STATES PATENT OFFICE.

EDWARD J. JENNER, OF SAN ANTONIO, TEXAS, ASSIGNOR TO HERBERT L. HILDRETH, OF BOSTON, MASSACHUSETTS.

CANDY-PULLING MACHINE.

No. 804,736. Specification of Letters Patent. Patented Nov. 14, 1905.

Application filed November 13, 1903. Serial No. 181,188.

To all whom it may concern:

Be it known that I, EDWARD J. JENNER, a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Candy-Pulling Machine, of which the following is a specification.

My invention relates to a novel machine for pulling candy, such as molasses candy and other kinds; and it consists in certain novel features of construction and arrangement fully described in this specification, clearly illustrated in the drawings, and particularly pointed out in the claims.

In the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of a candy-pulling machine constructed in accordance with my invention. Fig. 2 is a diagram showing the relative paths of motion of certain parts of the machine, as will be hereinafter more fully explained.

Referring to the drawings, which show an embodiment of my invention selected by me for the purpose of illustrating the same, 1, 2, and 3 represent three substantially parallel pins mounted in a standard 4, forming a part of the frame of the machine. 5 and 6 represent two other pins revolubly mounted in a standard 7, also forming part of the frame of the machine. These pins or members 5 6 are adapted to be revolved by any suitable mechanism, that shown in the drawings being a chain 8, engaging with sprockets upon the pins.

In the drawings I have shown a hand-crank 9 as the means by which power is applied to revolve the pins or members 5 6; but it is obvious that other means of applying power may be employed.

When the chain and sprocket are employed, as shown, the pins 5 6 will revolve in the same direction; but I have found that they may be revolved in opposite directions with at least equally good results.

The pins or members 5 6 are so disposed relatively to the pins or members 1 2 3 that when revolved they are moved in intersecting paths, and if the candy to be pulled be placed in the machine, preferably by laying it upon the pins or members 1 2 3, the motion of the pins or members 5 6 will operate to automatically feed and pull the candy.

The preferred arrangement and the path of motion of the moving pins or members 5 6 with reference to fixed pins or members 1 2 3 is that shown in the diagram Fig. 2.

I claim—

1. A candy-pulling machine comprising horizontally-disposed stationary supporting means, and a plurality of pulling means.

2. A candy-pulling machine comprising horizontally-disposed stationary supporting means, a plurality of pulling means, and means for moving the pulling means past the supporting means and above and below the same.

3. A candy-pulling machine comprising a plurality of horizontally-disposed stationary supporting means, a plurality of pulling means, and means for moving the pulling means past the supporting means and above and below the same.

4. A candy-pulling machine comprising horizontally-disposed stationary supporting means, a plurality of pulling means, and means for moving the pulling means in intersecting paths around the supporting means.

5. A candy-pulling machine comprising a plurality of stationary candy-supporting means, a plurality of pulling means, and means for moving the pulling means in intersecting paths around the supporting means.

6. In a candy-pulling machine, the combination of a plurality of pins mounted for movement in substantially parallel relation to each other in intersecting paths, and a member co-operating therewith to pull candy.

7. A candy-pulling machine comprising a framing, a pin carried by the frame, and shafts supported by the framing on opposite sides of the pin and having crank-arms, and pins carried thereby and arranged to revolve around the pin of the frame, and means for driving the shafts substantially as set forth.

8. A candy-pulling machine having shafts provided with crank-arms and pins thereon and the framing supporting said shafts and having a pin around which the pins of the crank-arms revolve, substantially as set forth.

9. A candy-pulling machine consisting of parallel revoluble shafts having cranks upon the outer end, hooks projecting upon said cranks, gears by which the shafts and cranks are revolved toward each other and a stationary rod or hook projecting between the revolving hooks.

10. The combination in a candy-pulling machine of parallel shafts having intermeshing gears by which they are revoluble in unison,

cranks fixed upon the ends of the shafts carrying hooks or arms which alternately approach and recede from each other with the revolution of the cranks, supports or hangers having horizontal pins projecting so as to stand between the approaching hooks whereby the mass of candy is alternately stretched between the stationary pin and the moving hooks.

EDWARD J. JENNER.

In presence of—
ALEX. P. BROWNE,
HERBERT L. HILDRETH.

Disclaimer in Letters Patent No. 804,726.

DISCLAIMER.

804,726.—*Edward J. Jenner*, San Antonio, Tex. CANDY-PULLING MACHINE. Patent dated November 14, 1905. Disclaimer filed November 14, 1914, by *Herbert L. Hildreth*, assignee.

Enters this disclaimer—

"To that part of the claims in said specification which is in the following words, to wit:

"1. A candy-pulling machine comprising horizontally-disposed stationary supporting means, and a plurality of pulling means.

[*Official Gazette, November 24, 1914.*]

Filed January 26, 1918. G. H. Marsh, Clerk.

Defendant's Exhibit "A."

No. 832,384. PATENTED OCT. 2, 1906.

H. L. HILDRETH.

CANDY PULLING MACHINE.

APPLICATION FILED SEPT. 21, 1900.

3 SHEETS—SHEET 1

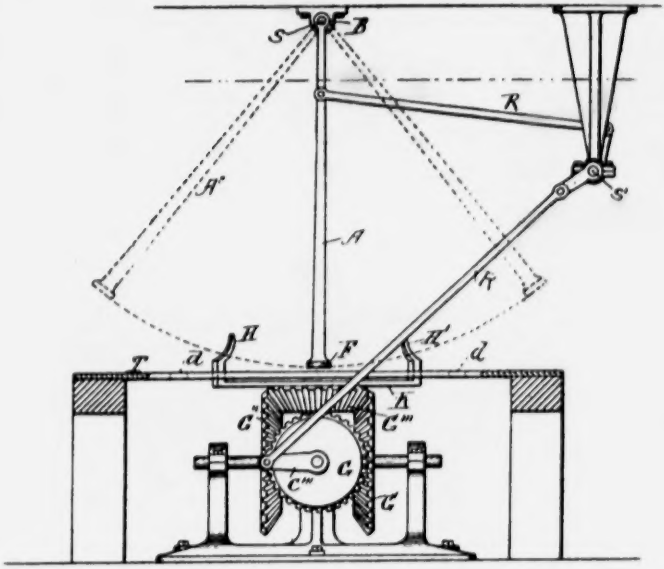


Fig. 1.

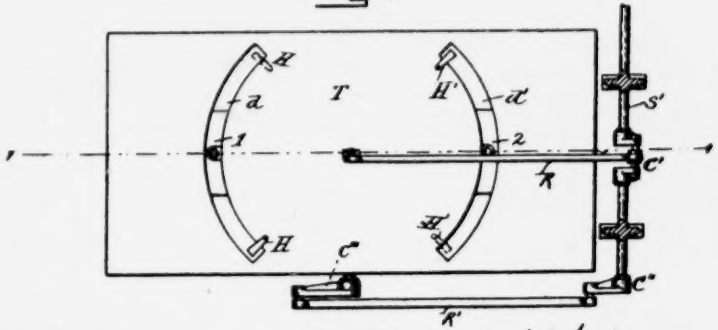


Fig. 2.

Witnesses:
Edwin B. Tomlinson
Philip J. Doherty

Inventor:
Herbert L. Hildreth
by Miles P. Browne,
attorney

No. 832,384 PATENTED OCT. 2, 1906.

H. L. HILDRETH.

CANDY PULLING MACHINE.

APPLICATION FILED SEPT. 21, 1900.

2 SHEETS—SHEET 2.

Fig 3

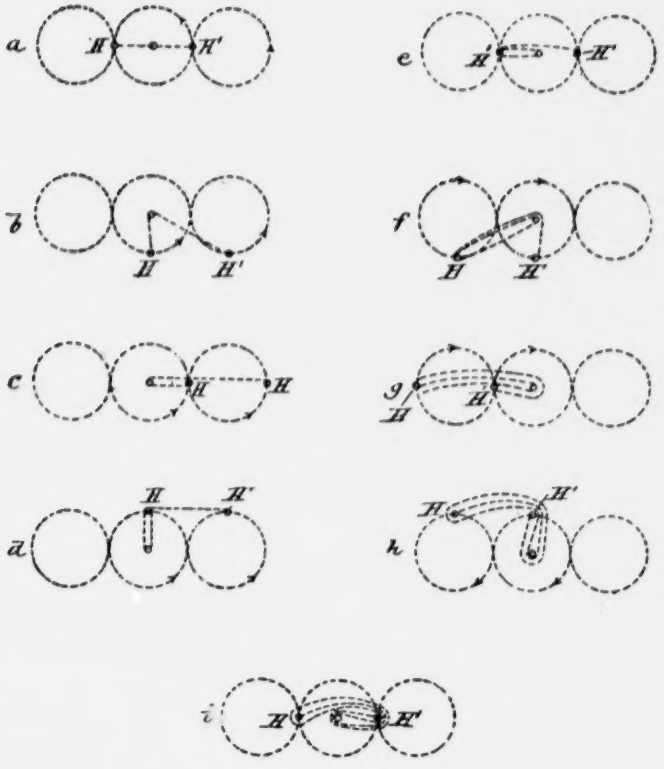


Fig 4.

WITNESSES:
Edwin B. Tomlinson
Philip J. Doherty

INVENTOR:
Herbert L. Hildreth
by Alex P. Browne
attorney

UNITED STATES PATENT OFFICE.

HERBERT L. HILDRETH, OF BOSTON, MASSACHUSETTS.

CANDY-PULLING MACHINE.

No. 832,389. Specification of Letters Patent. Patented Oct. 2, 1906.

Application filed September 21, 1900. Serial No. 30,703.

To all whom it may concern:

Be it known that I, HERBERT L. HILDRETH, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Candy-Pulling Machines, of which the following is a specification.

My invention relates to the manufacture of candy, and more particularly to candy-pulling. Its object is to provide a machine which may be driven by any suitable motor or source of power and which shall pull the candy supplied to it, producing a product equal to the best that has heretofore been obtained when the candy was pulled by hand.

Attempts have heretofore been made to work candy in a manner analogous to that in which dough and other substances are treated—that is to say, to place the mass within a receiving or supporting chamber into which moving arms project. An example of this construction is shown in United States Letters Patent No. 511,011, granted December 19, 1893, to P. J. G. Firchau. In such machines the mass of candy is supported in whole or in part by a chamber, and the function of the moving arms or projections is to alternately mass and stretch the material, as stated in said patent. This method of treatment and the machines which embody it are not successful or practical to produce the results heretofore obtained by hand-pulling, which results must be obtained in any successful candy-pulling machine.

My invention includes a pulling member or candy-puller, a plurality of what may be called "supports" for the candy or candy-hooks to which the batch of candy to be pulled is attached, and means for producing a relative in-and-out motion of these parts, to be hereinafter more fully described, whereby the candy is alternately pulled into hanks or strands and the hanks or strands so produced are reunited.

The relative in-and-out motion of the candy-puller and the candy-hooks may be realized by moving either the candy-puller or the candy-hooks, or both, and the mechanical devices by which this relative motion is accomplished are not essential to the invention.

As an illustration of the principles of my invention a specific embodiment thereof is shown in the drawings which accompany and form a part of this specification. In this particular form of the apparatus two candy-hooks are employed, and both the candy-puller and the candy-hooks are caused to move, thereby producing relative in-and-out motion of these parts; but no such joint motion is an essential of the invention, as will be hereinafter more fully explained, the essential parts of the invention being a plurality of candy-hooks, a candy-puller, and means of producing a relative in-and-out motion of these parts.

Figures 1 and 2 are drawings showing a specific form of candy-pulling mechanism embodying my invention. Fig. 3 is a diagram illustrative of the in-and-out motion of the candy-puller relative to the candy-hooks. Fig. 4 is a diagram illustrative of the in-and-out motion of the candy-hooks relative to the candy-puller.

In Fig. 1, A is the movable pulling member or candy-puller. It is rigidly attached to a horizontal shaft or trunnion S, supported in the bearings B, and is free to oscillate about the axis of shaft S in the plane of the paper. A reciprocating motion is imparted to the candy-puller A by the rotation of a horizontal shaft S′ through the intermediary of the double crank C′ and connecting-rod R. In its reciprocating motion the candy-puller A oscillates between the two positions indicated by dotted lines at A′ and A″. At its lower extremity the candy-puller preferably carries a flange or foot F, which serves to prevent the candy from slipping down.

H and H′ are candy-hooks mounted upon the extremities of the horizontal walking-beam K, which is centrally and rigidly attached to the axis of the beveled gear G‴, which forms part of the quadrantal gearing composed of the beveled gears G, G′, G″, and G‴.

A quadrantal motion is imparted to the gearing by the rotation of the shaft S′ through the intermediary of the crank C″, connecting-rod R′, and crank C‴. The walking-beam K being rigidly attached to the axis of the gear G‴, a reciprocating quadrantal motion is thereby imparted to it and to the candy-hooks H H′, which oscillate in a horizontal plane.

T is a table or platform interposed between the candy-pulling mechanism and the driving-gear below.

Fig. 2 is a plan view of the table T and candy-hooks, showing also the shaft S′ and the two cranks C′ and C″. In this figure, d

and *d'* are two slots cut in the platform T to permit of the reciprocatory motion of the two candy-hooks H and H'. In the operation of the mechanism these candy-hooks oscillate between the positions H and H' and H, and H,', respectively.

In using the mechanism to pull candy the batch of candy is formed into a strand or hank, the ends of which are attached to the candy-hooks H and H', respectively. The mechanism is then set in operation, the result of which is that the candy-puller A catches the hank at its central point and extends it in two strands or hanks till the candy puller reaches the position shown at A'; but in the interval during which the candy-puller has moved from the position shown at A to the position shown at A' the candy-hook H' has moved from its initial position to its central position 2, Fig. 2, and the two hanks are reunited. On the return stroke of the candy-puller from the position shown at A' to the position shown at A the candy-hook H' moves from the position 2 to the position shown at H,', and the reunited strands are maintained at substantially the same length. The candy-puller next passes to the position shown at A'' and back to A, executing the same motions relative to the hook H as have just been described relative to the hook H', and this cycle is repeated, alternately pulling the candy into two strands and reuniting the strands as pulled.

Careful consideration will show that the relative motion of the puller to the candy-hooks, if the candy-hooks be regarded as stationary, is that shown diagrammatically in Fig. 3, in which, as in Figs. 1 and 2, H and H' indicate the candy-hooks and the dotted curved line in the shape of a figure 8 is the locus of the candy-puller relative to the candy-hooks. It is easily seen, therefore, that in the device described the candy-hooks need not be movable, but may be fixed to the platform, and that the candy-puller may have imparted to it two reciprocating motions at quadrature with each other without changing the results obtained. Similarly by developing the motion of the candy-hooks relative to the candy-puller a suitable motion of the candy-hooks is found, which if imparted to the candy-hooks while keeping the candy-puller fixed will not alter the function of the machine.

Fig. 4 illustrates diagrammatically the motion which may be imparted to the candy-hooks while keeping the candy-puller stationary in order to realize the hereinbefore-described in-and-out motion of the candy-hooks relative to the candy-puller. In this figure the circles shown in dotted lines indicate the loc of the candy-hooks H and H', a complete cycle during the operation of the machine being divided into eight equal intervals.

The successive positions of the candy-hooks during such cycle are shown, beginning at *a*, Fig. 4, in which the two hooks and the candy-puller are in line. They pass successively through the phases *b c d h* to *i*, in which latter phase they are again in the same line and about to repeat the cycle shown. In this diagram, moreover, the hanks or strands of candy are indicated by a dotted line or lines in such a manner as to illustrate the pulling of the candy.

Careful consideration of my invention as herein set forth will show that in practising it the mass of candy is not inclosed or supported within a chamber or receptacle, nor is it alternately stretched and massed. On the other hand, the candy is supported at all times during the pulling operation solely by means of the devices which I have hereinbefore spoken of as the "candy-hooks" or the "candy-puller," while the motions of these devices in the manner described operate to extend or stretch the candy and to produce lapping or reuniting of the pulled strands or hanks into position to be pulled or stretched again, but at the same time without massing the candy.

An examination of Fig. 4 in particular will show that by means of my invention there is no alternate massing and stretching, as in the prior art, but a stretching and lapping, as before explained.

It is to be noticed that in any machine embodying the invention hereinbefore set forth the question of whether or not the members which take part in the pulling operation should be more accurately designated as "supporting" members or as "pulling" members may depend in whole or in part upon the manner of their disposition with reference to the effect of gravity upon the candy during the pulling operation. For example, in the apparatus of Fig. 1 the parts or members H H' have a double function—that is, that being disposed horizontally they tend to support the candy which is connected to them against gravity and also serve to hold the ends of the candy batch against the pull of the part A. Hence the application of the expression "pulling member" or "candy-puller" to the part A is not to be taken as indicating that the parts H H', to which the term "support" is applied, may not also take part in the pulling operation. In the embodiment of my invention shown diagrammatically in Fig. 3, in which the so-called "supports" H H' are stationary and the "puller," so called, moves around and between H H', it is obvious that the function of supporting and pulling the candy may be shared by these parts in a manner dependent upon the planes in which they may be disposed with reference to gravity. The same is true of Fig. 4, wherein the two members above spoken of as "candy-supports" are shown as moving circularly

with reference to a stationary so-called "candy-puller."

Having fully described my invention, I claim—

1. In a candy-pulling machine, in combination, a pair of pins or candy-pulling members a coöperating swinging pulling-lever, and means for moving one of said pair of members and said lever in intersecting paths, whereby they automatically feed and pull the candy.

2. In a candy-pulling machine, the combination of a pair of pulling members, means for imparting an arcuate movement to one of said members, a coöperating pulling member, and means for moving said last-named member so as to intersect the arcuate path of said first-named moving member.

3. In a candy-pulling machine, the combination of a pair of pulling members, means for moving one of said members in an arcuate path, an oscillating pulling member, and means for moving said oscillating member to intersect the arcuate path of said first-named moving member.

4. A candy-pulling machine comprising means for supporting the candy against gravity, means for pulling the candy, and means for producing a relative in-and-out motion of said supporting and pulling means.

5. A candy-pulling machine comprising means for supporting the candy against gravity, and means for pulling the candy, said pulling means being movable in and out with reference to said supporting means.

6. A candy-pulling machine comprising means for supporting the candy, means for pulling the candy, and means for producing an in-and-out motion of both said supporting and pulling means.

7. A candy-pulling machine comprising a plurality of candy-supports, pulling means, and means for moving said pulling means between said supports.

8. A candy-pulling machine comprising a plurality of candy-supports, pulling means, and means for moving said pulling means between and around said supports.

9. A candy-pulling machine comprising a plurality of candy-supports, pulling means, and means for moving said pulling means between and around said supports in a figure-8 path.

10. A candy-pulling machine having an oscillating beam carrying candy-supports on opposite sides of its center of oscillation, and a pulling member reciprocating across the path of motion of said supports.

11. A candy-pulling machine having a horizontally-disposed oscillating beam carrying candy-supports on opposite sides of its center of oscillation, and a pulling member reciprocating about a horizontal axis, and across the path of motion of said supports.

12. A candy-pulling machine having a pair of horizontally-disposed, candy-supports, a pulling member, and means for oscillating said supports, and reciprocating said pulling member across said path of oscillation.

13. In a candy-pulling machine, a pair of candy-supports, a pivoted reciprocating pulling-lever having a puller at its free end swinging in a vertical plane, the swinging movement of the puller constituting the whole of the relative pulling movement of the puller and the supports, and means for imparting opposite, reciprocating, position-shifting movements to the respective supports which bring them alternately on opposite sides of the path of the puller.

14. In a candy-pulling machine, a candy-puller having a flaring or spreading free end.

15. In a machine for pulling candy, pulling members movable relatively to each other for continuously pulling the strands of candy.

16. In a machine for pulling candy, pulling members movable relatively to each other for continuously pulling the candy and for intermittently lapping the strands of candy.

In testimony whereof I have hereunto subscribed by name this 12th day of September, 1900.

HERBERT L. HILDRETH

Witnesses:
CHAS. C. KURTZ,
ALEX. P. BROWNE.

Filed January 26, 1918. G. H. Marsh, Clerk.

No. 736,313. PATENTED AUG. 11, 1903.

C. THIBODEAU.

METHOD OF PULLING CANDY.

APPLICATION FILED JULY 10, 1901.

NO MODEL. 3 SHEETS—SHEET 1.

FIG. 1.

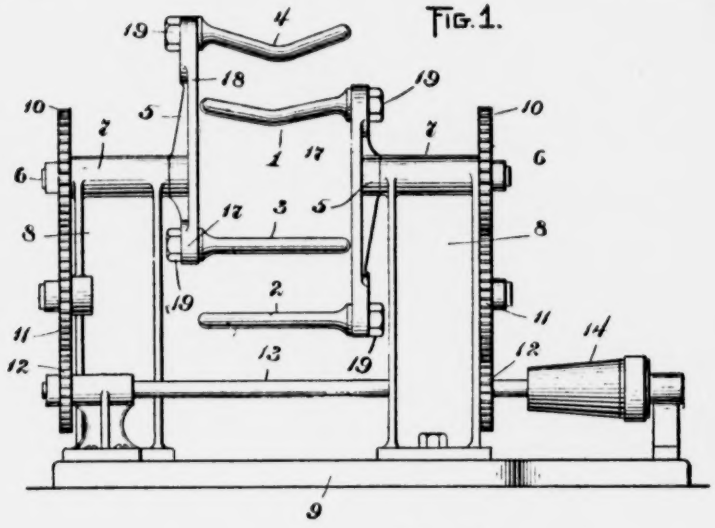
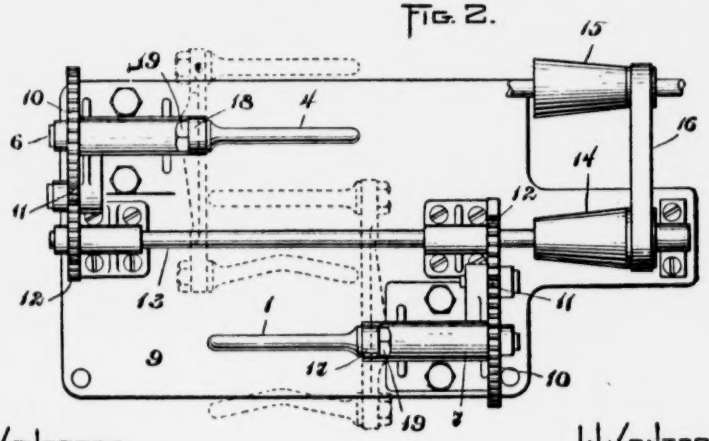


FIG. 2.



WITNESSES:

E. Batchelder

George Coppitt

INVENTOR:

Charles Thibodeau

By Wright Brown & Quinby Attys

No. 736,313. PATENTED AUG. 11, 1903.

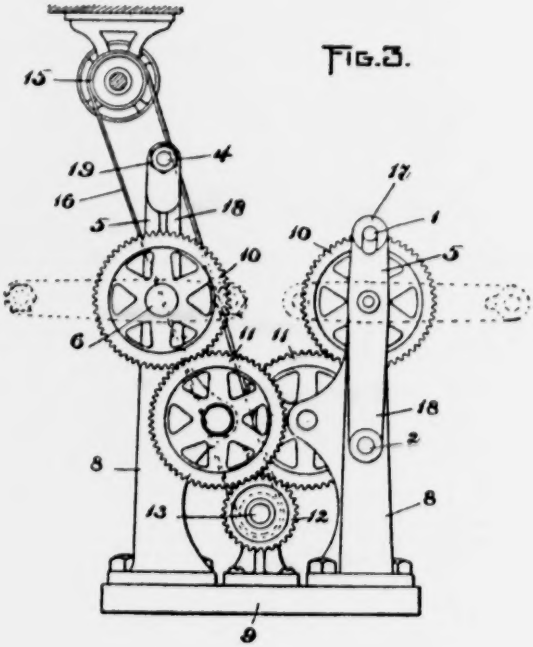
C. THIBODEAU.

METHOD OF PULLING CANDY.

APPLICATION FILED JULY 10, 1901.

NO MODEL. 3 SHEETS—SHEET 2

FIG. 3.



WITNESSES:
E. F. Batchelder
George Bynes

INVENTOR:
Charles Thibodeau
By Wright Brown Quinby & Otts
Attys

No. 736,313. PATENTED AUG. 11, 1903.

C. THIBODEAU.

METHOD OF PULLING CANDY.

APPLICATION FILED JULY 10, 1901.

NO MODEL. 3 SHEETS—SHEET 3.

FIG. 4.

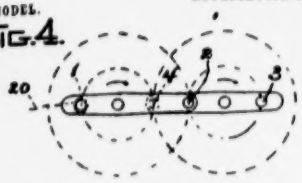


FIG. 5.

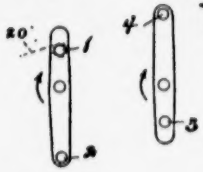


FIG. 6.

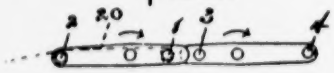


FIG. 7.

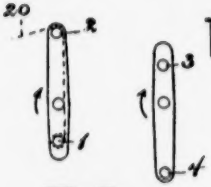


FIG. 8.

FIG. 9.

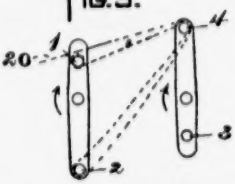


FIG. 10.

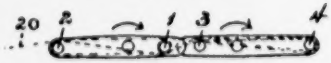


FIG. 11.

FIG. 12.

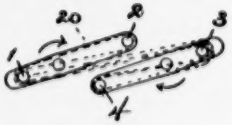
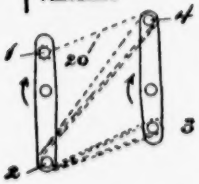


FIG. 13.



WITNESSES:
E. Batchelder
George Bryett.

INVENTOR:
Charles Thibodeau
By Wright Brown & Quinby
Attys

No. 736,313. Patented August 11, 1903.

UNITED STATES PATENT OFFICE.

CHARLES THIBODEAU, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO CATHERINE M. THIBODEAU, OF SOMERVILLE, MASSACHUSETTS.

METHOD OF PULLING CANDY.

SPECIFICATION forming part of Letters Patent No. 736,313, dated August 11, 1903.

Application filed July 10, 1901. Serial No. 67,695. (No model.)

To all whom it may concern:

Be it known that I, CHARLES THIBODEAU, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Methods of Pulling Candy, of which the following is a specification.

This invention relates to a new and improved method of pulling candy; and it consists in certain novel features of construction and arrangement of parts, fully described in the specification, clearly illustrated in the drawings, and particularly pointed out in the claims.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents an end elevation of a candy-pulling machine constructed in accordance with my invention. Fig. 2 represents a plan view thereof. Fig. 3 represents a side elevation. Figs. 4 to 13, inclusive, represent diagrammatic views showing different positions of the working parts of the machine.

The same reference characters indicate the same parts in all of the figures.

Referring to the drawings, wherein is shown the mechanism for carrying out my invention, 1, 2, 3, and 4 represent four substantially parallel pins secured to levers 5 5. The levers 5 are secured to the inner ends of two shafts 6 6, which are journaled in bearings 7 7 at the upper ends of standards 8 8, said standards 8 8 being shown as mounted upon a base 9. Each shaft is provided with a gear 10, which meshes with an intermediate gear or idler 11, the latter in turn meshing with a gear 12. The two gears 12 are secured to a common drive-shaft 13, rotated in any suitable manner, as by means of cone-pulleys 14 15 and a shifting-belt 16, whereby different speeds of the said shaft may be obtained. By the described arrangement of shafts and gearing the levers 5 5 are rotated in the same direction at an equal speed. Each lever has a short arm 17 and a long arm 18, at the ends of which arms the pins 1, 2, 3, and 4 are affixed. The said pins are thus located at unequal distances from their axes of revolution, the pins 1 2 on the short arms 17 being located nearer to the shafts 6 6 than the pins 2 4 on the longer arms 18.

The pins 1, 2, 3, and 4 and their supporting-shafts 6 are so related that the circles described by the pins 1 and 3, which are nearest the shafts 6 6, do not intersect, while the circles described by the pins 2 4, which are farthest away from the shafts 6 6, intersect each other. The result of this construction is a novel action, the successive stages of which are represented in Figs. 4 to 13. Figs. 4 to 11 show the positions of the parts at quarter-turns of the shafts 6 6. Fig. 12 shows their positions at slightly less than a quarter-turn from the positions shown in Fig. 11. Fig. 13 shows the positions at slightly more than a quarter-turn from the positions shown in Fig. 12.

Let it be assumed that an elongated rope or batch 20 of candy has been attached to the pin 1. When the pins are all in one plane and the pins 2 4 on the long arms of the levers have crossed each other's paths, a quarter-turn of the shafts will bring the parts to the position represented in Fig. 5. Another quarter-turn causes the rope of candy to overlie the pin 2 of the same set as pin 1, as shown in Fig. 6. Another quarter-turn bends the rope 20 over pin 2, as shown in Fig. 7. Another quarter-turn causes the rope to be doubled on the pins 1 2 and brings the pin 4 of the set on the other bracket underneath the doubled strands, as illustrated in Fig. 8. The next quarter-turn brings the parts to the position represented in Fig. 9, in which the doubled rope supported by the pins 1 2 has been pulled out or stretched into a loop by the pin 4. The next quarter-turn brings the pins 1 3 on the short arms adjacent to each other with the pin 3 about to come into action, as shown in Fig. 10. It may be assumed that the feeding of the rope of candy is then discontinued and the machine has received its full quota. In the next quarter-turn the pins 1 3 draw away from each other and pull or stretch out the candy between them. In Fig. 12, which shows the parts just before the completion

of the next quarter-turn, the pins 2 4 on the long arms are crossing each other's paths and the candy, which is already in quadruple strands, is about to be doubled again on each set of pins. After the pins have come into the same plane the next quarter-turn brings them into the positions shown in Fig. 13, in which both the pins 2 and 4 are exerting the action which the pin 4 is exerting in Fig. 9. The next quarter-turn brings the parts again to positions shown in Fig. 10, and the subsequent pulling is a repetition of the action shown in Figs. 10, 11, 12, and 13. It will be understood that after each stretch caused by the moving away from each other of two pins carrying the candy the mass that is intermediate of said pins is then laterally deflected by the next pin to engage it. The operation of my improved machine therefore causes the candy to be quickly and uniformly stretched out by the pins, which act as pullers. One pin in each set, as the pins 1 and 4 in the drawings, may be bent or bowed toward their axes of revolution in order to keep the candy centered on the rods.

In the operation of the machine the candy is not necessarily wound on the pins successively, as shown in Figs. 4 to 10, this method being selected merely to clearly illustrate the action of the machine. The candy may be applied to the machine in any suitable manner. For instance, when the parts have the positions represented in Fig. 6, the pins 1 and 3 being adjacent, a batch of candy may be wrapped around or molded on said pins 1 and 3 and the machine then started, whereupon the action illustrated in Figs. 10 to 13 will soon ensue and be continuously repeated. In starting to work a batch of candy the machine is preferably run slowly at first and its speed gradually increased until the normal working speed has been attained. In the operation of the machine the candy is alternately automatically fed and refed to the pins (see Figs. 9 and 12) and then pulled and repulled, (see Figs. 8 and 13,) this operation continuing until the candy has been pulled to the desired extent.

I do not confine myself to the exact construction shown, as various modifications may be made within the scope of the invention, which includes power-driven candy-pulling pins arranged to move in intersecting and non-intersecting paths and to automatically feed and refeed the candy to each other and then pull or repull the fed or refed candy.

In the place of the pins I may employ other forms of pulling members and the arms and pins may be differently arranged and positioned, so long as they operate the described way. The path of motion of the pins may, if desired, be made that of polygons besides circles.

Having thus explained the nature of my invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all the modes of its use, what I claim, and desire to secure by Letters Patent, is—

1. The method of pulling candy which consists in moving one portion of a batch in a continuous path, simultaneously moving another portion in a different continuous path to stretch the intermediate mass, and then laterally deflecting the said intermediate mass.

2. The method of pulling candy which consists in moving one portion of a batch in a continuous path, simultaneously moving another portion in a different continuous path to stretch the intermediate mass, then laterally deflecting the said intermediate mass and moving it in a continuous path differing from the two first-mentioned paths, and continuing these operations to alternately pull the candy and carry it from one path to another.

In testimony whereof I have affixed my signature in presence of two witnesses.

CHARLES THIBODEAU.

Witnesses:
E. BATCHELDER.
H. L. ROBBINS.

Filed January 26, 1918. G. H. Marsh, Clerk.

Defendant's Exhibit "E."

No. 772,442. PATENTED OCT. 18, 1904.

C. THIBODEAU.

CANDY PULLING MACHINE.

APPLICATION FILED MAR. 20, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

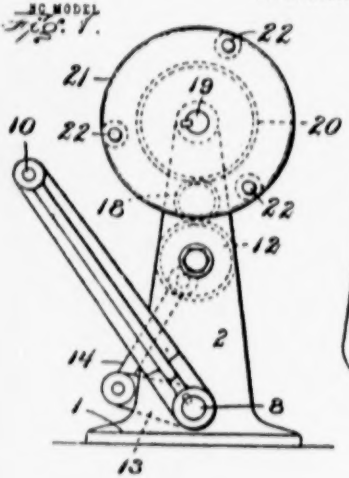


Fig. 2.

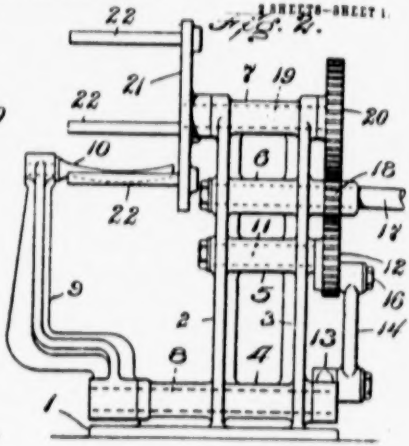


Fig. 3.

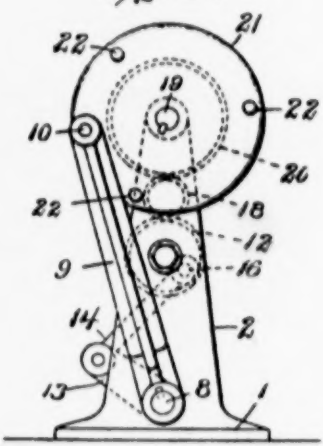
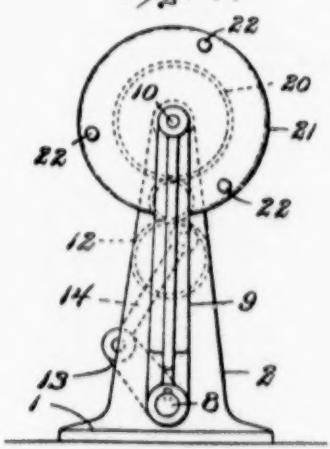


Fig. 4.



Witnesses:
C. Bullock.
Walter D. Abell.

Inventor,
Charles Thibodeau
by Wright Brown & Quinby
Attys.

No. 772,442. PATENTED OCT. 18, 1904.

C. THIBODEAU.

CANDY PULLING MACHINE.

APPLICATION FILED MAR. 28, 1904.

NO MODEL. 3 SHEETS—SHEET 2

Fig. 5.

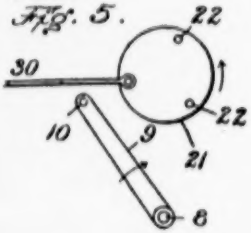


Fig. 8.

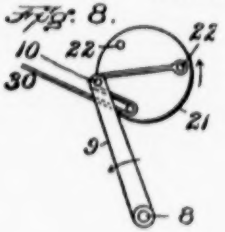


Fig. 6.

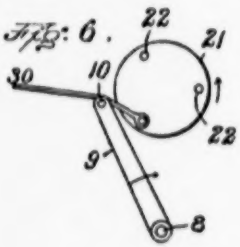


Fig. 9.

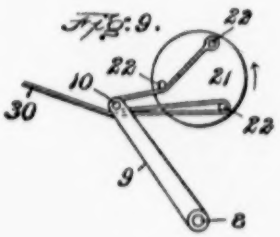


Fig. 7.

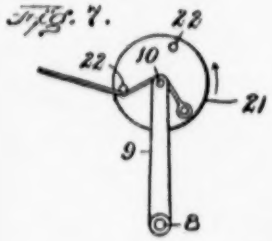


Fig. 10.

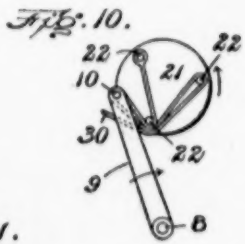
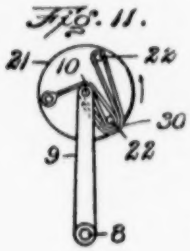


Fig. 11.



Witnesses:
R. Bullock
Walter P. Abell.

Inventor:
Charles Thibodeau
by Wright Brown & Quinby
Attys.

No. 772,442 Patented October 18, 1904.

UNITED STATES PATENT OFFICE.

CHARLES THIBODEAU, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR TO P. DUFF & SONS, OF PITTSBURG, PENNSYLVANIA.

CANDY-PULLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 772,442, dated October 18, 1904.

Application filed March 28, 1904. Serial No. 200,334. (No model.)

To all whom it may concern:

Be it known that I, CHARLES THIBODEAU, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Candy-Pulling Machines, of which the following is a specification.

Figure 1 is a side elevation of a machine made in accordance with my invention. Fig. 2 is a front elevation of said machine. Fig. 3 is a view similar to Fig. 1, showing the parts in a different position. Fig. 4 is a view showing a different position of the parts from that shown in Figs. 1 and 3. Figs. 5 to 11, both inclusive, are diagrammatic views showing the successive relative positions in relation to each other occupied by the oscillating hook and the rotary hooks.

1 represents a suitable base. Upon this base, in the form herein shown and integral therewith, are arranged two parallel uprights 2 3, formed with bearings 4, 5, 6, and 7. In the form of machine herein shown these bearings are integral with the uprights. This feature, however, is not essential, but is convenient for cheapness of construction and strength.

8 represents a shaft arranged in the bearing 4. To one end of this shaft is secured one end of an arm 9.

10 represents a candy puller or pin carried by the free end of the arm 9.

11 represents a short shaft arranged in the bearing 5 and carrying a spur-gear 12 upon its outer end.

13 represents a crank one end of which is fastened upon the inner end of the shaft 8.

14 represents a pitman to one end of which is connected the free end of the crank 13. The opposite end is connected to a pin 16, carried by the gear 12. By this construction as the gear 12 rotates a rocking motion is given to the shaft 8 and a vibrating motion to the pin 10.

17 represents a shaft arranged in the bearing 6, carrying a spur-gear 18. This shaft 17 may be extended, as shown, for the purpose of attaching a pulley, crank, or other means for connecting said shaft 17 with a suitable source of power.

19 represents a shaft arranged in the bearing 7, having secured to its outer end a spur-gear 20, meshing with the spur-gear 18, receiving its motion from the latter.

21 represents a disk secured to the inner end of the shaft 19 and carrying upon its inner face a plurality of candy hooks or pullers 22, here shown as three in number, although this number may be varied. The rotation of the gear 20 causes the rotation of the disk 21, thereby rotating the pins 22. In place of the disk the pins may be carried by arms, the latter, together with their common hub, forming a spider, or in any preferred way.

The operation of my improved machine is as follows: The rotation of the shaft 17 causes the gears 20 and 12 to rotate, thus giving a vibrating motion to the pin 10, heretofore referred to, and a rotary motion to the pins 22. These movements are so timed that the pin 10 passes back and forth across the paths of motions of the pins 22 without striking said pins. Where three pins are employed and the parts are connected together as shown in these drawings, the vibrating pin 10 passes first outside of one pin and inside of the succeeding pin, and so on.

Figs. 5 to 11 show the successive positions assumed by the pins. In Fig. 5 the pin 10 does not engage the candy 30. Such engagement, however, does occur in Fig. 6. In Fig. 7 the candy is forced between the two consecutive pins 22 and the pin 10 has reached its limit of inward movement. In Fig. 8 the pin 10 has started out. In Fig. 9 the pin has reached its limit of outward movement and a new pin 22 has engaged the candy. In Fig. 10 the parts are at substantially the position shown in Fig. 6, except that all of the hooks are in engagement with the candy, and the machine will therefore continuously pull until the mass is properly whitened or tempered. Fig. 11 shows a continuation of the movement after Fig. 10.

A machine constructed in accordance with my invention is highly efficient and simple in construction.

The hooks or pins 22 are shown in the draw-

ings as at the same radial distance from the axis of their revolution; but it is to be understood that such radial distance may vary—that is, one hook or pin 22 may move in the path of a larger circle than another pin 22. The said hooks or pins are, however, mounted to follow each other in the same plane of revolution, so as to engage and operate upon the same batch of candy that is being pulled.

Having thus explained the nature of my invention and described a way of making and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, what I claim, and desire to secure by Letters Patent, is—

1. In combination with the coöperative elements of a candy-pulling machine, a plurality of hooks mounted to follow each other in the same plane of revolution, a puller, and means for vibrating the latter across the paths of motion of said hooks.

2. In combination with the coöperative elements of a candy-pulling machine, three revolving pins arranged upon a common axis to follow each other in one plane of revolution, a puller, and means for vibrating said puller across the paths of motion of said pins.

3. In combination with the coöperative elements of a candy-pulling machine, a rotating disk carrying a plurality of candy-hooks, a puller, and means for vibrating the puller across the paths of motion of said revolving hooks.

In testimony whereof I have affixed my signature in presence of two witnesses.

CHARLES THIBODEAU.

Witnesses:
H. L. Robbins,
R. Bullock.

Filed January 26, 1918. G. H. Marsh, Clerk.

Defendant's Exhibit "F."

No. 779,141. PATENTED JAN. 3, 1905.

C. THIBODEAU.

CANDY PULLING MACHINE.

APPLICATION FILED APR. 18, 1904.

2 SHEETS—SHEET 1

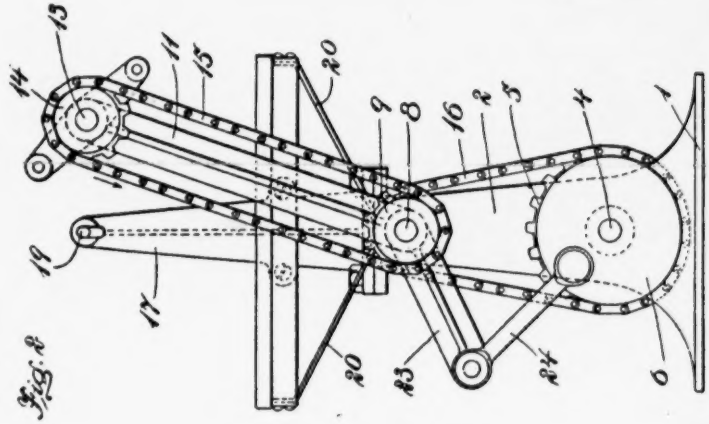


Fig. 2.

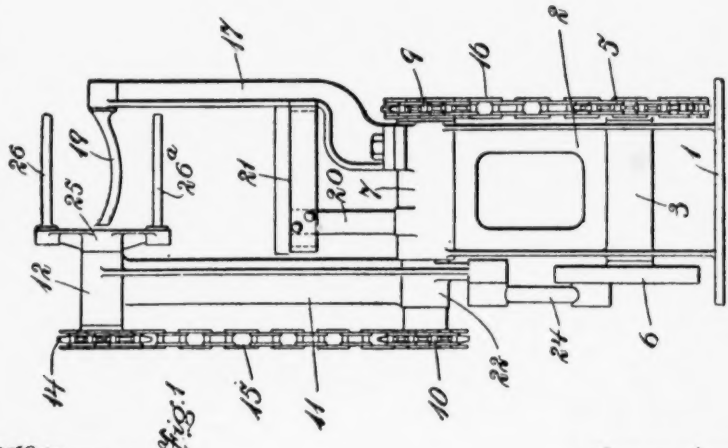


Fig. 1.

Witnesses:
H. L. Rothine.
R. Bullock

Inventor:
Charles Thibodeau
By Wright Brown & Quinby
Attorneys.

No. 779,141. PATENTED JAN. 3, 1905.

C. THIBODEAU.

CANDY PULLING MACHINE.

APPLICATION FILED APR. 18, 1904.

2 SHEETS—SHEET 2

Fig. 3

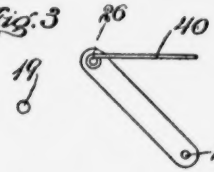


Fig. 8

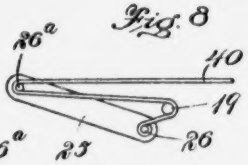


Fig. 4

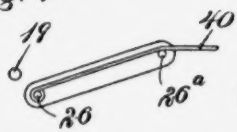


Fig. 9

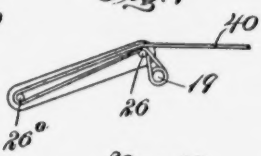


Fig. 5

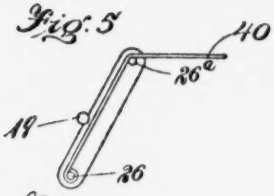


Fig. 10

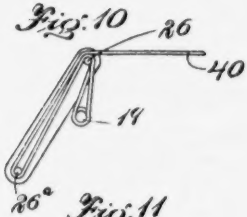


Fig. 6

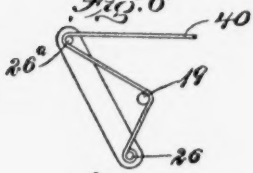


Fig. 11

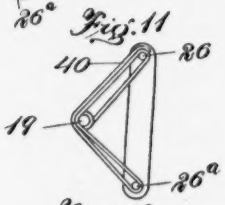


Fig. 7

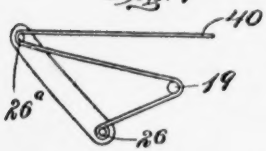
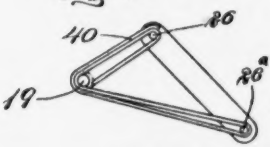


Fig. 12



Witnesses:
H. L. Robbins.
A. Bullock.

Inventor:
Charles Thibodeau
by Wright Brown & Quinby
Attorneys.

No. 779,141. Patented January 3, 1905.

UNITED STATES PATENT OFFICE.

CHARLES THIBODEAU, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR TO P. DUFF & SONS, A FIRM, OF PITTSBURG, PENNSYLVANIA.

CANDY-PULLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 779,141, dated January 3, 1905.

Application filed April 13, 1904. Serial No. 203,544.

To all whom it may concern:

Be it known that I, CHARLES THIBODEAU, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Candy-Pulling Machines, of which the following is a specification.

Figure 1 in side elevation shows a machine constructed in accordance with my invention. Fig. 2 represents a left-hand elevation. Figs. 3 to 11, both inclusive, are diagrammatic views showing the successive relative positions in relation to each other occupied by the oscillating hook and the rotary hooks.

1 represents a suitable base carrying a vertical standard 2.

3 represents a bearing in the middle and near the lower part of the standard 2. In this bearing is arranged a shaft 4, adapted to be driven in any desired way, (not shown,) either by means of a pulley or the continuation of said shaft or otherwise, as preferred.

5 represents a sprocket-gear fast on the right-hand end of the shaft 4. 6 represents a disk fast on the left-hand end of said shaft.

7 represents a bearing formed at the upper end of the standard 2 over the bearing 3.

8 represents a shaft arranged in the bearing 7.

9 represents a sprocket-wheel fast on the right-hand end of the shaft 8.

10 represents a sprocket-gear fast on the left-hand end of the shaft 8.

11 represents an arm extending up from a hub 22, loosely mounted on the shaft 8 at the left-hand end of the machine and carrying at its upper end a bearing 12.

13 represents a shaft arranged in the bearing 12. 14 represents a sprocket-wheel fast on the left-hand end of said shaft.

15 represents a sprocket-chain connecting the sprocket-wheels 10 and 14.

16 represents a sprocket-chain connecting the sprocket-wheels 5 and 9.

17 represents an arm bolted to the top of the bearing 7 at the right-hand end of the machine. This arm at its upper end carries a stationary candy-hook 19, said hook extending from the left-hand side of the arm.

20 represents posts extending up from the bearing 7 between the arm 11 and the arm 17. These posts 20 support the table 21, arranged, as shown, between the arm 11 and the arm 17 and beneath the stationary hook 19.

23 represents a crank integral with the hub 22.

24 represents a pitman, one end of which is pivoted to the free end of the crank 23, its opposite end being pivoted to the stud on the disk 6.

25 represents a double crank mounted upon the inner end of the shaft 13, each arm of said crank being of equal length and carrying at its free end the candy-hook 26 and 26*, the hook 19 being substantially in the plane of the arc of movement of the shaft 13.

Power being applied to the machine the rotation of the shaft 4 causes the rotation of the shaft 8, and thereby the rotation of the shaft 13 and of the candy-hooks 26 and 26*, about said shaft as an axis. Further, the rotation of the shaft 4, by means of the crank 23 and pitman 24, oscillates the hub 22 and the shaft 8, thereby vibrating the shaft 13 in an arc whose center is the shaft 8. The candy-hooks 26 are thus given a movement of rotation about their axis 13 and also a vibratory movement in an arc the center of which is the shaft 8, the latter being in the same vertical plane as the stationary hook 19, so that the extent of the vibration of the hooks 26 and 26* in the form here shown is the same on each side of the hook 19. The speed of the hooks 26 and 26* is so adjusted in relation to the speed of the vibration of the arm 11 that they alternate in position each time they pass the stationary hook 19.

Assuming the parts to be in the position shown in Fig. 3, the candy 40 is placed on the hook 26. In starting the machine the axis of the crank 25 approaches the hook 19. The former, meanwhile, rotating upon its axis carries the hooks 26 26* to the position shown in Fig. 4. A further movement of the machine brings the parts to the position shown in Fig. 5, with the hook 19 in contact, or nearly so, with the candy above the hook 26 and below the hook 26*. A further move-

ment of the parts carries the axis of the crank 25 past the hook 19 to the position, for instance, as shown in Fig. 6, the candy having been subjected to a pulling action due to the travel of the parts from the position shown in Fig. 5 to that shown in Fig. 6. A further movement or operation of the machine brings the parts to the position shown in Fig. 7, where the crank 25 has nearly reached the limit of its travel in one direction and the hook 26 is about to pass the hook 19. Fig. 9 shows the position of the parts, with the hook 26 past the hook 19 and in position for the crank 25 to begin its reverse vibrating motion. Fig. 9, compared with Fig. 3, shows substantially one revolution of the pin 13 with the hooks 26 and 26* and one complete movement of the crank 25 in one direction, it being understood, of course, that the candy can be placed upon the hook 26 or 26* at any desired point, the point shown in Fig. 3 being taken for purposes of illustration, with the hooks 26 and 26* and 19 close to each other to avoid too many duplications of figures to show the travel of the parts. In Fig. 10 the crank 25 has started its reverse vibrating motion. In Fig. 11 the hook 19 has engaged the candy below the hook 26 and above the hook 26*. This is substantially a reversal of the position of the parts shown in Fig. 6. Fig. 12 shows a further movement of the parts and brings the hooks to substantially the positions shown in Fig. 3. From the foregoing it will be seen that the hooks 26 and 26* pass in and out and about the hook 19 and subject the candy to a continuous pulling action, the action of the hooks 26 and 26* being to pull the candy against the hold of the hook 19 and also to wind up the pulled candy.

Having thus explained the nature of my invention and described a way of making and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, what I claim, and desire to secure by Letters Patent, is—

In combination with the coöperative elements of a candy-pulling machine, a stationary puller or hook, a plurality of rotating hooks, and means for vibrating the latter across the plane of the former.

In testimony whereof I have affixed my signature in presence of two witnesses.

CHARLES THIBODEAU.

Witnesses:
H. L. ROBBINS,
R. BULLOCK.

Filed January 26, 1918. G. H. Marsh, Clerk.

Defendant's Exhibit "G."

No. 781,853. PATENTED FEB. 7, 1905.

C. THIBODEAU.

CANDY PULLING MACHINE.

APPLICATION FILED APR. 19, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

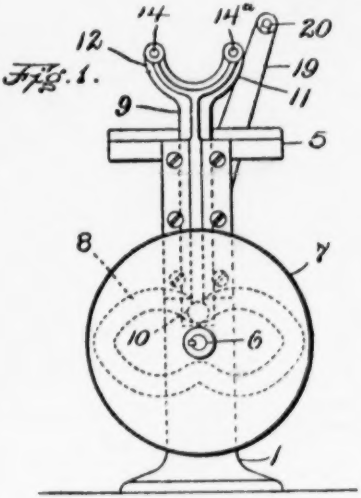


Fig. 3.

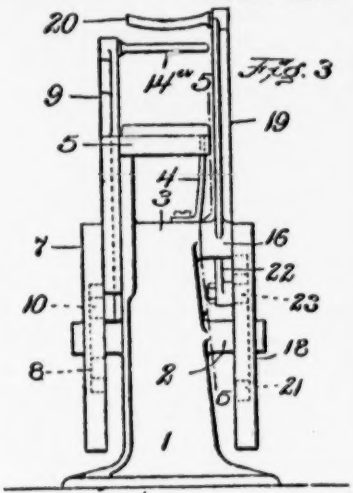


Fig. 2.

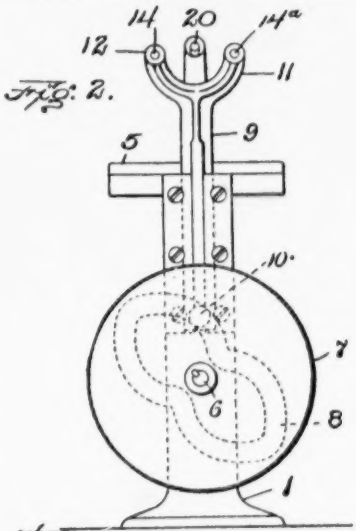
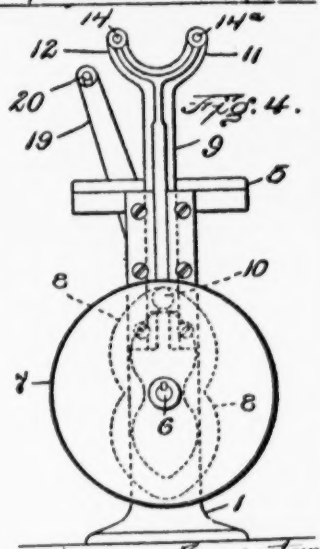


Fig. 4.



Witnesses:
H. L. Robbins
R. Bullock

Inventor:
Charles Thibodeau
by Wright Brown & Quinby
Attys.

No. 781,853. PATENTED FEB. 7, 1905.

C. THIBODEAU.

CANDY PULLING MACHINE.

APPLICATION FILED APR. 18, 1904.

2 SHEETS—SHEET 2.

Fig. 7.

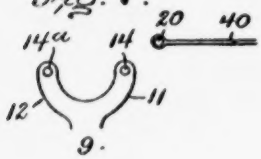


Fig. 5.

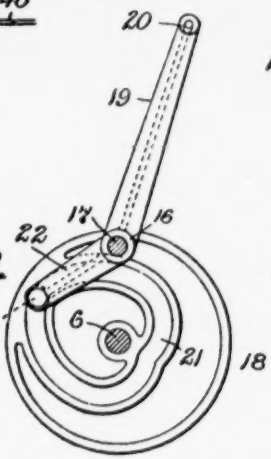


Fig. 11.

Fig. 8.

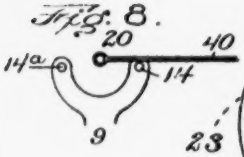


Fig. 12.

Fig. 9.

Fig. 13.

Fig. 6

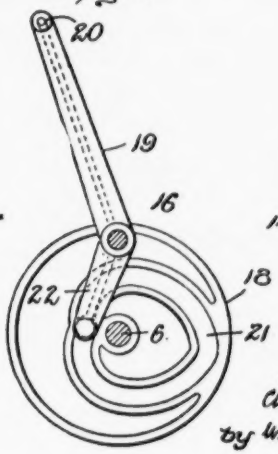


Fig. 10.

Fig. 14.

Witnesses:
H. L. Hotchkiss
R. Bullock

Inventor:
Charles Thibodeau
by Wright Brown & Quinby
Attys.

No. 781,853. Patented February 7, 1905.

UNITED STATES PATENT OFFICE.

CHARLES THIBODEAU, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR TO P. DUFF & SONS, A FIRM, OF PITTSBURG, PENNSYLVANIA.

CANDY-PULLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 781,853, dated February 7, 1905.

Application filed April 18, 1904. Serial No. 203,545.

To all whom it may concern:

Be it known that I, CHARLES THIBODEAU, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Candy-Pulling Machines, of which the following is a specification.

Figure 1 is a left-hand end elevation representing a machine constructed in accordance with my invention. Fig. 2 is a like view showing a different position of the parts. Fig. 3 is a front elevation. Fig. 4 is a view similar to Fig. 2, showing the parts in different positions. Figs. 1, 2, and 4 show the complete motion of the vibrating hook from right to left. Fig. 5 is a detail view showing in front elevation the cam for the vibrating hook and the connection between the cam and said hook. Fig. 6 is a like view showing the parts in different position. Figs. 7 to 14, both inclusive, are diagrammatic views showing the successive relative positions in relation to each other occupied by the oscillating hook and the rotary hooks.

1 represents a suitable standard formed with a bearing 2 near its base and with a bearing 3 at a suitable distance above the bearing 2.

4 represents an arm secured to the top of the bearing 3 and supporting a table 5.

6 represents a shaft formed in the bearing 2 and adapted to be driven by any suitable source of power and by means of any desired connection, whether by way of the extension of the shaft 6 or otherwise.

7 represents a disk fast on the left-hand end of the bearing 2 and formed upon its inner face with a cam-path 8.

9 represents a slide arranged to move in vertical ways on the left-hand side of the machine. This slide at its lower end is provided with a roll 10, arranged in the cam-path 8. The slide 9 at its upper end is formed with arms 11 12, each of which carries a candy-hook 14 14*. As power is applied to the machine the slide 9 is given two complete reciprocations for each rotation of the shaft 6.

16 represents a hub mounted upon a pintle 17, secured in the bearing 3 at the right-hand end of the machine.

19 represents a vertical arm formed on the hub 16 and provided at its free end with a candy-hook 20, the hooks 20 and 14 14* projecting toward each other over the table 5. (See Fig. 3).

18 represents a disk secured to the shaft 6 on the right-hand end of the machine. (See Figs. 3, 5, and 6.) This disk upon its inner face is formed with a cam-path 21.

22 represents an arm formed upon the hub 16. Said arm at its free end carries a roller 23, arranged in the cam-path 21. By this arrangement the rotation of the disk 18 causes a vibration of the end of the arm 19 and of the hook 20, one complete vibration being made of the said hook 20 for each rotation of the shaft 6. The parts are so timed, as stated, that while the hook 20 is given one complete vibration two complete reciprocations are given to the hooks 14 14*, the result being that the hook 20 has a path of motion about the hooks 14 14*.

Assuming the parts to be in the position shown in Fig. 7, the candy 40 is placed on the hook 20 and the machine started. The parts are so timed that the hook 20, with the candy 40, passes over the hook 14 just in time for the latter to engage the candy by the time the hook 20 is positioned between the hooks 14 and 14*. The continued movement of the machine causes the hook 20 to pass to the left and the hooks 14 14* to rise, thus causing the hook 20 to pass beneath the hook 14*, as shown in Fig. 9. As the machine continues to operate the hooks 14 14* complete their downward movement, and the hook 20 completes its movement to the left, as shown in Fig. 10, wrapping the candy about the hook 14*. The hooks 14 14* rising and the hook 20 passing to the right, as shown in Fig. 11, passes over the hook 14*, between the hooks 14 14*, and below the hook 14, as shown in Fig. 12. When the hook 20 is past the hook 14, the hooks 14 14* move downward to the position shown in Fig. 13. This brings the parts to substantially the position shown in Fig. 7, a further movement being a repetition of the movement shown in Fig. 8. In this arrangement the hooks 14 14* are reciprocated

twice for each corresponding motion of the hook 20, thus causing the hook 20 to move in and about the hooks 14 and 14*.

Having thus explained the nature of my invention and described a way of making and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, what I claim, and desire to secure by Letters Patent, is—

In a candy-pulling machine, a vibrating puller, a pair of hooks arranged to reciprocate in a right line only and in the plane of the puller, means for operating said parts arranged to give two complete reciprocations to the hooks for each corresponding movement of the puller, whereby the latter is caused to describe a general figure-8 path of motion.

In testimony whereof I have affixed my signature in presence of two witnesses.

CHARLES THIBODEAU.

Witnesses:
R. BULLOCK,
H. L. ROBBINS.

Filed January 26, 1918. G. H. Marsh, Clerk.

Defendant's Exhibit "H."

(Patent No. 857,770.)

Same as Plaintiff's Exhibit 15. [294]

Defendant's Exhibit "I."

No. 859,788. PATENTED JULY 9, 1907.

C. THIBODEAU.

CANDY PULLING MACHINE.

APPLICATION FILED AUG. 2, 1901.

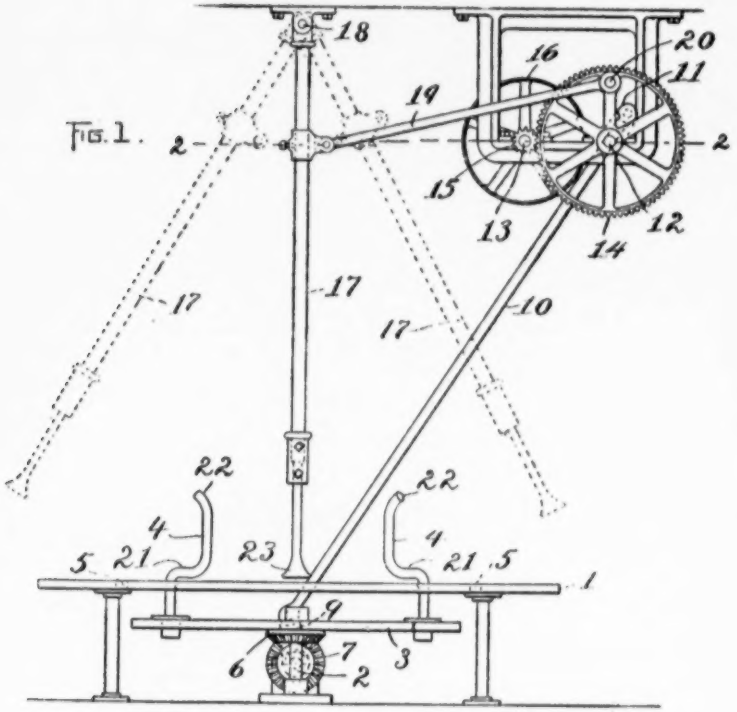


Fig. 1.

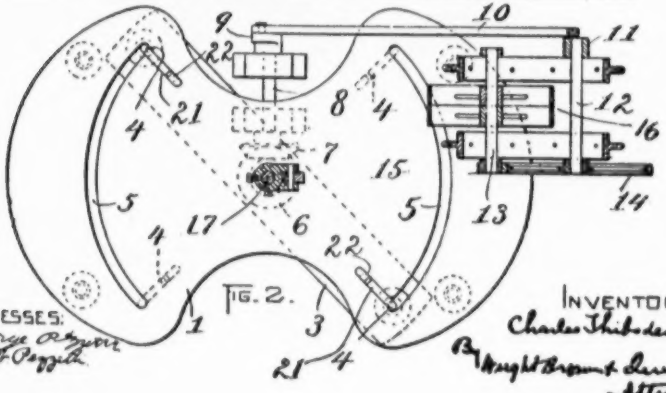


Fig. 2.

WITNESSES:
George A. Spear
O. M. Poggill

INVENTOR:
Charles Thibodeau
By Wright Brown & Quinby
Attys.

UNITED STATES PATENT OFFICE.

CHARLES THIBODEAU, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO EDWARD A. KITZMILLER, OF PITTSBURG, PENNSYLVANIA, AND ROBERT P. DUFF, OF SWISSVALE BOROUGH, PENNSYLVANIA, TRADING UNDER FIRM-NAME OF P. DUFF & SONS, OF PITTSBURG, PENNSYLVANIA.

CANDY-PULLING MACHINE.

No. 859,788. Specification of Letters Patent. Patented July 9, 1907.

Application filed August 3, 1901. Serial No. 70,833.

To all whom it may concern:

Be it known that I, CHARLES THIBODEAU, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Candy-Pulling Machines, of which the following is a specification.

This invention relates to machines for pulling candy and it consists in certain novel features of construction hereinafter described in the specification, illustrated in the drawings, and pointed out in the claims.

Of the accompanying drawings, which show an embodiment of my invention selected by me for the purpose of illustrating the invention,—Figure 1 represents a side elevation of a candy-pulling machine constructed in accordance with my invention. Fig. 2 represents a horizontal section on the line 2—2 of Fig. 1.

The same reference characters indicate the same parts in all the figures.

In the drawings,—1 represents a table, below which, on a vertical shaft or pivot 2, is journaled an oscillating arm 3 having at its two ends two upwardly-projecting hook-shaped candy pegs or hooks 4 4 which project through segmental slots 5 5 in the table 1. The arm 3 is oscillated by mechanism including a bevel-gear 6 on the arm meshing with a bevel-gear 7 on a horizontal shaft 8 which has a crank 9 on its outer end. The crank 9 is connected by a link 10 with a shorter revolving crank 11 on a shaft 12 which is rotated by connection with a shaft 13 through a gear 14 on shaft 12 and an intermeshing gear 15 on shaft 13, said shaft 13 having a belt-pulley 16.

17 is a puller consisting of an arm pivoted to swing in a vertical plane on a pivot 18 and oscillated in synchronism with the candy-pegs by connection through a link 19 with a wrist pin 20 on the side of the gear 14.

The lower end of the puller 17 moves in a path which extends between the candy-hooks 4 4 and beyond or outside thereof in both directions. The candy is fastened in the form of a hank upon the hooks and extends across between them, so that as the puller 17 moves across the line connecting the hooks, it engages the hank at the middle thereof and elongates it or pulls it out. The oscillatory movement of the arm 3 causes the hooks 4 4 to reciprocate in opposite directions from the full-line positions to the dotted-line positions shown in Fig. 2 and vice versa. The movement of the puller across the line connecting the hooks occurs when the hooks are substantially at rest in their extreme positions as represented in Fig. 2, and when the puller is at the extreme end of its movement outside of the hooks, as represented by either of the dotted-line positions in Fig. 1, the hooks are shifting their positions from one extreme to the other. As the puller moves out from its middle position to its extreme position the hank of candy is stretched out as previously stated and is wrapped in strands around the nearest hook by the shifting movement of said hook. As the puller then moves back to and past its middle position in the opposite direction it crosses the line connecting the hooks, from the opposite side, and in so doing it first lays the pulled-out loop of candy back on the hank and then pulls out the hank in the opposite direction. The strands are then wound around the opposite hook and laid back on the hank, which operation completes a cycle. The cycles are repeated until the candy is sufficiently pulled. As to the relative movement of the candy-hooks or pegs and the puller, it is characteristic of my machine that the entire position-shifting movement is given to the pegs and the entire pulling movement to the puller.

The hooks or pegs 4 4 are provided with lower portions 21—21 directed toward each other or converging in the direction of the line of pull of the candy to prevent the candy from falling down the hooks, and with free end portions 22 22 directed away from each other to prevent the candy from being drawn upwardly off the hooks by the action of the puller. The puller 17 is provided with a flaring or spreading lower end portion 23 to prevent the candy from slipping down off the puller.

I claim:—

1. In a candy pulling machine, moving members and oppositely disposed candy pegs thereon, said parts being arranged to cause the candy to work away from the ends of the said pegs during the pulling operation.

2. In a candy pulling machine, oppositely disposed candy pegs having the sides thereof converging in the direction of the line of pull of the candy.

3. In a candy pulling machine, a pair of oppositely-directed, hook-shaped candy pegs having lower portions directed toward each other and upper free ends directed away from each other, to retain the candy on the pegs.

In testimony whereof I have affixed my signature, in presence of two witnesses.

CHARLES THIBODEAU.

Witnesses:
GEORGE PEZZETTI,
P. W. PEZZETTI.

Filed January 26, 1918. G. H. Marsh, Clerk.

Defendant's Exhibit "J."

No. 881,442. PATENTED MAR. 10, 1908.

E. M. ROBINSON & J. H. DEITER.

CANDY PULLING MACHINE.

APPLICATION FILED JULY 19, 1906. 2 SHEETS—SHEET 1.

Fig. 1.

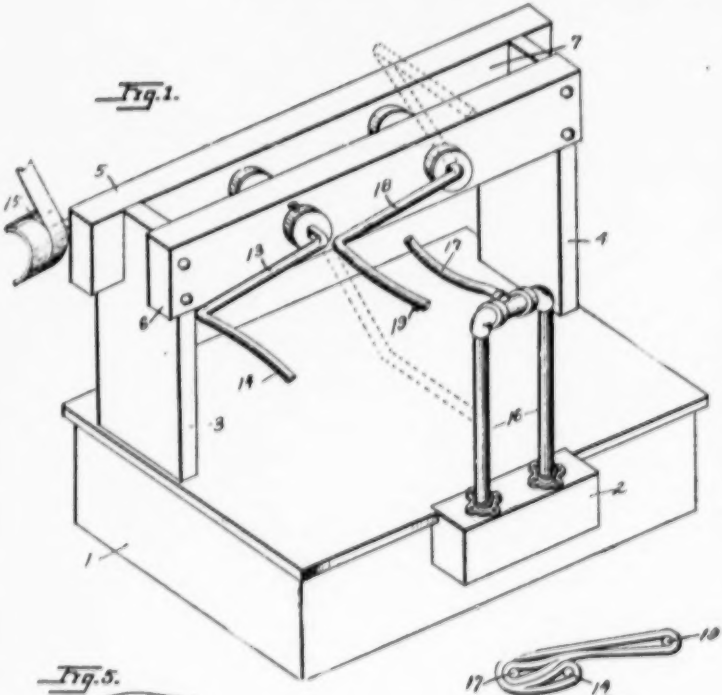


Fig. 5.

Fig. 7.

Fig. 6.

Fig. 8.

Fig. 8.

WITNESSES:
Chas. F. Hassel.
L. F. Bassler.

INVENTORS.
Edward M. Robinson
By Jacob H. Deiter.
Wm. R. Gerhart
ATTORNEY.

No. 881,442. PATENTED MAR. 10, 1908.

E. M. ROBINSON & J. H. DEITER.

CANDY PULLING MACHINE.

APPLICATION FILED JULY 18, 1903.

3 SHEETS—SHEET 1.

Fig. 2.

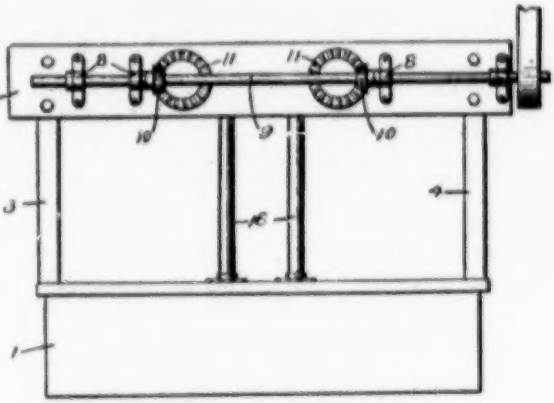


Fig. 3.

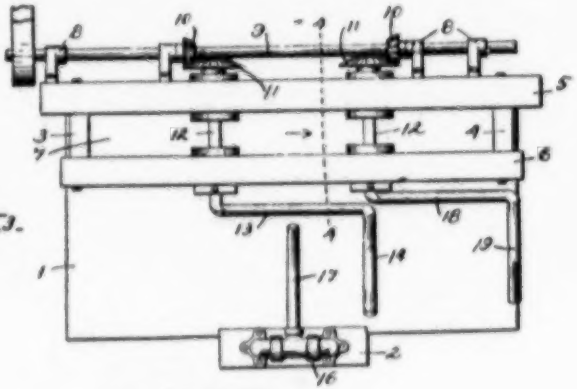
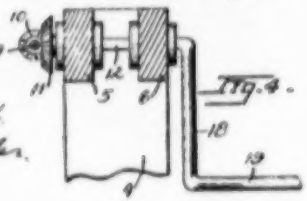


Fig. 4.



WITNESSES

Edgar S. Trowbridge.

C. P. Bassler.

INVENTORS

Edward M. Robinson

Jacob H. Deiter

BY Wm. L. Forhan

ATTORNEY

UNITED STATES PATENT OFFICE.

EDWARD M. ROBINSON AND JACOB H. DEITER, OF LANCASTER, PENNSYLVANIA, ASSIGNORS, BY MESNE ASSIGNMENTS, TO HERBERT L. HILDRETH, OF BOSTON, MASSACHUSETTS.

CANDY-PULLING MACHINE.

No. 881,442. Specification of Letters Patent. Patented March 10, 1908.

Application filed July 12, 1902. Serial No. 115,988.

To all whom it may concern:

Be it known that we, EDWARD M. ROBINSON and JACOB H. DEITER, citizens of the United States, and residents of Lancaster, county of Lancaster, and State of Pennsylvania, have invented certain Improvements in Candy-Pulling Machines, of which the following is a specification.

This invention relates to improvements in machines adapted to take the place of hand-labor in pulling candy; and the objects of these improvements are to simplify the construction of such machines, to lessen the cost of manufacturing the same, and to reduce the amount of power necessary to operate them.

The invention consists in the construction and combination of the several parts, as hereinafter fully described, and then pointed out in the claims.

The invention is illustrated in the accompanying drawing, forming a part of this specification, and in which

Figure 1, is a top perspective view of a construction embodying our invention; Fig. 2, a rear-elevation of the same, showing the manner in which the operating mechanism is applied; Fig. 3, a top plan view of the machine; and Fig. 4 a vertical transverse section on broken line 4—4 of Fig. 3. Figs. 5, 6, 7, 8 and 9 illustrate various relative positions of the stretching arms.

Similar numerals indicate like parts throughout the several views.

For the purposes of this specification the side of the machine on which the operating mechanism is located will be taken to be the back or rear and the opposite side the front.

Referring to the details of the drawing, 1 indicates the base, having a forward central extension 2.

3 and 4 indicate posts located at opposite ends of base 1 and having longitudinally-disposed parallel stringers 5 and 6 connecting the same and framed into the sides of their upper ends, so as to leave a slot or opening 7 between them. In brackets 8 on the rear face of stringer 5 is journaled, longitudinally of said stringer, a shaft 9 having thereon beveled pinions 10, that mesh with beveled gears 11 on the rear ends of shafts 12, extending through stringers 5 and 6 and having on their front ends crank-shaped arms 13—14 and 18—19, the elongated wrists 14 and 19 whereof extend forward over base 1. Motion is imparted to shaft 9 through a pulley 15 and a belt, or by means of a crank, or in any other desirable manner. As shown in Figs. 2 and 3, the gearing is so disposed as to revolve the shafts 12 in opposite directions, with their respective crank shaped arms.

Opposite the center of the space separating shafts 12 is a standard 16, bolted to extension 2 of the base, and extending rearwardly from the upper end of said standard is a stationary arm 17, projecting to and within the circumference of the movement of wrists 14 and 19.

In operation, the revolution of crank-arms 13—14 and 18—19 pulls the candy around, under, and over stationary arm 17, which acts as a counter to produce tension or stretch the candy between itself and said arms 13—14 and 18—19 and also between said arms. This operation is illustrated in Figs. 5, 6, 7, 8 and 9, wherein the mass of candy is shown in Fig. 5 in the position occupied thereby when first placed in the machine, and in Figs. 6, 7, 8 and 9 successively in various positions into which it is thrown during the operation of pulling. Each mass of candy passes through these various positions time and again, until sufficiently pulled.

We do not confine ourselves to the use of any special gearing for operating our candy-pulling machine; nor do we restrict ourselves to the relative location of the revoluble and stationary arms; neither do we confine ourselves to other details of construction shown and described, as it is obvious that many alterations may be made therein without departing from the principle and scope of our invention.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent, is—

1. The combination, in a device of the character described, of a plurality of revoluble arms, one of said arms revolving in one direction and another of said arms revolving in another direction, and stationary means for creating tension in matter carried by said arms.

2. The combination, in a device of the character described, of an arm revoluble in one direction, an arm revoluble in another direction, and located between said arms means for creating tension in matter carried thereby.

3. The combination, in a device of the character described, of an arm revoluble in

271
~~266~~ *Jim M. Mastoras vs.*

Le 271

in opposite directions as described and the candy depending from the inner finger will be engaged by the finger H, and will be carried in the opposite direction and stretched and worked. This takes place at each rotation of the heads, the candy being alternately massed and stretched, and it will thus be seen that it is quickly and thoroughly worked. In some cases the fingers H, H', are provided at intervals in their length with knobs as *j*, so as to better adapt them to hold the candy and prevent the same from slipping off.

I have specifically described the construction and relative arrangement of the several parts of my improved machine so as to impart a full and clear understanding of the same, but I do not desire to be confined to such construction and arrangement as such changes or modifications may be made in practice as fairly fall within the scope of my invention.

Having described my invention, what I claim is—

1. In a machine for working candy and other substance, the combination of a hollow cylindrical body, suitable means for fixing said body against rotation, heads having circular grooves in their inner sides to receive the ends of the body and carrying lateral fingers arranged so as to travel in different orbits, and suitable means for rotating said heads in opposite directions, substantially as and for the purpose set forth.

2. In a machine for working candy and other substance, the combination of a hollow body, heads closing the ends of said body, trunnions connected to the heads and journaled in suitable bearings, a collar loosely mounted on one of the trunnions and adapted to engage the bearing thereof, and suitable means for adjustably fixing said collar, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

PAUL JOHN GOTTLIEB FIRCHAU.

Witnesses:
M. C. BENSON,
ELMER STONE

Filed January 26, 1918. G. H. Marsh, Clerk.

Defendant's Exhibit "K."

UNITED STATES OF AMERICA.
DEPARTMENT OF THE INTERIOR.
UNITED STATES PATENT OFFICE.

To All to Whom These Presents Shall Come, GREETING:

THIS IS TO CERTIFY that the annexed is a true copy from the records of this office of the

Letters Patent of
Paul John Gottlieb Firchau.

Number 511,011. Granted December 19, 1893.

for

Improvement in Machines for Working Candy.

In Testimony Whereof I have hereunto set my hand and caused the seal of the PATENT OFFICE to be affixed at the city of Washington, this ninth day of January, in the year of our Lord one thousand nine hundred and eighteen, and of the Independence of the United States of America the one hundred and forty-second.

[Seal] R. F. WHITEHEAD,
Acting Commissioner of Patents. [300]

No. 511,011.

THE UNITED STATES OF AMERICA.

To All to Whom These Presents Shall Come:

Whereas, Paul John Gottlieb Firchau, of West Plains, Missouri, has presented to the Commissioner of Patents a petition praying for the grant of letters patent for an alleged new and useful improvement in Machines for Working Candy, a description of which invention is contained in the specification of which a copy is hereunto annexed and made a part hereof, and has complied with the various requirements of law in such case made and provided; and

Whereas upon due examination made the said claim-

ant is adjudged to be justly entitled to a patent under the law;

Now, therefore, these Letters Patent are to grant unto the said Paul John Gottlieb Firchau, his heirs or assigns, for the term of seventeen years from the nineteenth day of December, one thousand eight hundred and ninety-three, the exclusive right to make, use, and vend the said invention throughout the United States and the Territories thereof.

In Testimony Whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed, at the city of Washington, this nineteenth day of December, in the year of our Lord one thousand eight hundred and ninety-three, and of the Independence of the United States of America the one hundred and eighteenth.

[Seal] JNO. M. REYNOLDS,
Assistant Secretary of the Interior.

Countersigned:

JOHN S. SEYMOUR,
Commissioner of Patents. [301]

(No Model.)

P. J. G. FIRCHAU.

MACHINE FOR WORKING CANDY.

No. 511,011. Patented Dec. 19, 1893.

Fig. 1.

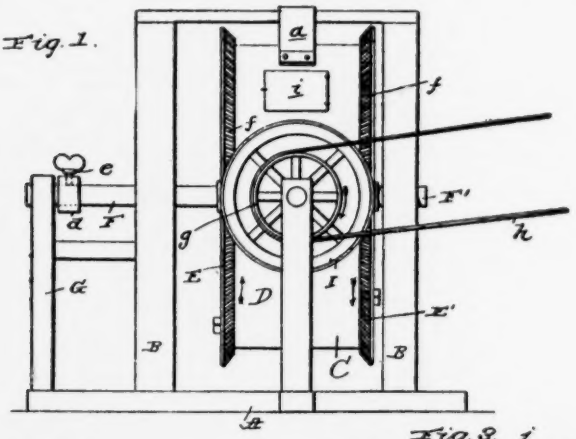


Fig. 2.

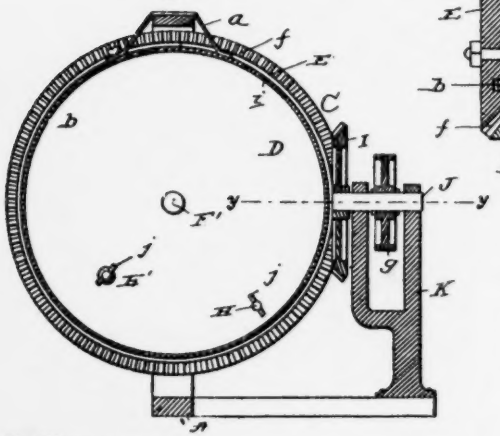
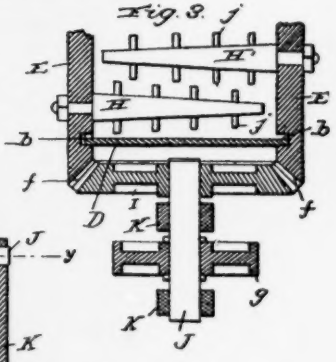


Fig. 3.



Witnesses:
C. F. Randolph
W. F. Matthews.

Inventor
Paul J. G. Firchau
By James J. Shelby
Attorney

UNITED STATES PATENT OFFICE.

PAUL JOHN GOTTLIEB FIRCHAU, OF WEST PLAINS, MISSOURI.

MACHINE FOR WORKING CANDY.

SPECIFICATION forming part of Letters Patent No. 511,011, dated December 19, 1893.

Application filed March 9, 1893. Serial No. 465,362. (No model.)

To all whom it may concern:

Be it known that I, PAUL JOHN GOTTLIEB FIRCHAU, a citizen of the United States, residing at West Plains, in the county of Howell and State of Missouri, have invented certain new and useful Improvements in Machines for Working Candy; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in machines for working or pulling candy or the like, and it has for its general object to provide such a machine of a cheap, simple and durable construction and one which is adapted to thoroughly work a large mass of candy in a short space of time.

Another object of the invention is to provide a candy working machine embodying such a construction that its capacity may be readily and conveniently increased when desired.

Other objects and advantages of the invention will be fully understood from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1, is a front elevation of the machine. Fig. 2, is a vertical section taken at right angles to Fig. 1, and Fig. 3, is a horizontal section taken in the plane indicated by the line *y*, *y*, of Fig. 2.

Referring by letter to said drawings: A, indicates the base of my improved machine which may be of any approved form and construction, and B, indicates the standards or uprights which rise from said base and are designed to support the candy receiving drum C, as will be presently described. The drum C, is preferably formed from metal and it comprises a hollow cylindrical body D, which is held against rotation preferably by the strap *a*, and the rotary disk like heads E, E′, which are provided in their inner sides with circular grooves *b*, to loosely receive the ends of the body D, as better shown in Fig. 3. Thus it will be seen that the heads and body of the drum may be readily disconnected by simply moving the heads laterally in opposite directions and if desired a drum of greater length and proportionately greater capacity may be readily placed and secured between the heads.

F, F′, indicate the trunnions of the heads E, E′, which extend laterally from said heads and are journaled in the standards B, as shown. One of these trunnions F, is of sufficient length to permit play of its head between the body D, and the adjacent standard; and this trunnion F, extends entirely through the standard B, and an auxiliary standard G, and it is provided with a loose collar *d*, which is designed to be adjustably fixed by a set screw *e*, so as to engage the standard G, and hold the disk E, in the position desired. By this construction it will be readily perceived that the disks E E′, may be readily separated, and the body D, may be conveniently removed, cleansed and replaced without the employment of skilled labor, which is a desideratum. Furthermore it will be seen that the distance between the disks may be varied so as to enable them to receive bodies of different lengths between them.

Suitably connected to the disks E, E′, at points off the center and extending inwardly therefrom, are the fingers H, H′, which are designed to engage and pull or work the candy as will be presently described. These fingers H, H′, are carried in opposite directions by their heads, and they are consequently arranged at different distances from the center of the drum so as to pass each other when in operation. The heads E, E′, may be rotated in opposite directions by any suitable gearing, but I prefer in practice to provide them with bevel gear teeth as *f*, and drive them through the medium of the bevel gear wheel or pinion I, which engages both heads as illustrated. This pinion or gear wheel I, is mounted on a shaft J, disposed at right angles to the drum, and this shaft is journaled in a standard K, and is provided with a pulley *g*, around which takes a belt *h*, which may be driven by any suitable motor.

The gearing above described is desirable for the reason that it is very compact and takes but a minimum amount of floor space which is always an advantage in a candy factory and similar places.

In the practical operation of my improved machine, the candy is introduced into the drum through the door *i*, formed in the body D, and is hung upon one of the fingers of the heads, preferably the inner finger H′. The door is then closed and the machine is set in motion when the heads E, E′, will be rotated

one direction, an arm revoluble in another direction, and located midway between said arms means for creating tension in matter carried thereby.

4. The combination, in a device of the character described, of an arm revoluble in one direction, an arm revoluble in another direction, and located midway between said arms stationary means for creating tension in matter carried thereby.

5. The combination, in a device of the character described, of an arm revoluble in one direction, an arm revoluble in another direction, and located opposite and between said arms means for creating tension in matter carried thereby.

6. The combination, in a device of the character described, of two revoluble arms, a stationary arm located opposite and between said revoluble arms and projecting to and within the circumference of the movement of the revoluble arms, and means for moving said revoluble arms in opposite directions.

7. The combination, in a device of the character described, of a shaft, pinions on said shaft and beveled on opposite sides, crank arms having beveled gears meshing with the pinions, and a stationary arm located opposite and between said crank-arms and projecting to and within the circumference of the movement of said crank-arms.

EDWARD M. ROBINSON.
JACOB H. DEITER.

Witnesses:
C. G. BASSLER,
WM. R. GERHART.

Filed January 26, 1918. G. H. Marsh, Clerk. [304]

Defendant's Exhibit.

No. 752,979. PATENTED FEB. 23, 1904.

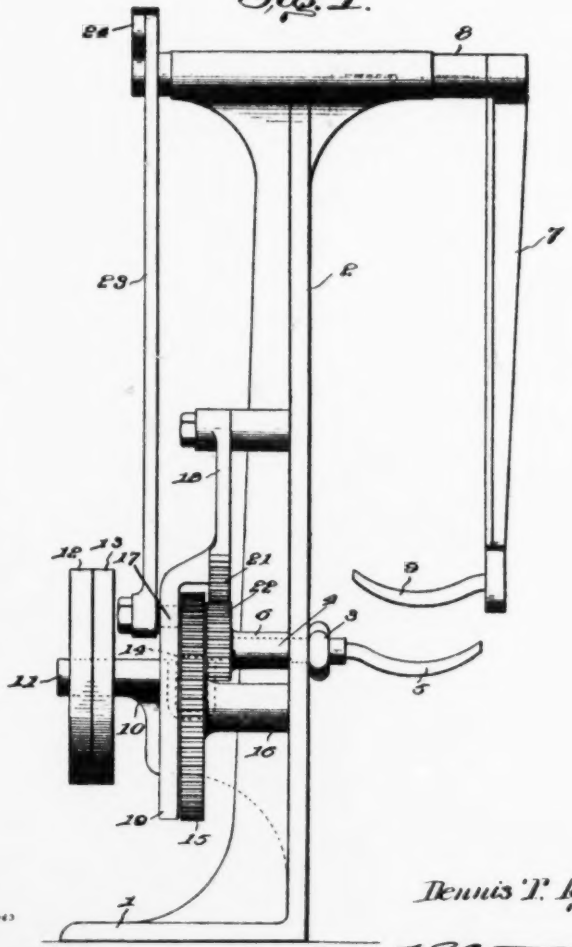
D. T. IGOU.

CANDY PULLING MACHINE.

APPLICATION FILED SEPT. 17, 1903.

NO MODEL. 4 SHEETS—SHEET 1.

Fig. 1.



Witnesses:
G. Howard Wakeley.
Gertrude Young.

Inventor
Dennis T. Igou,
By H. A. Toulmin
Attorney

No. 752,979. PATENTED FEB. 23, 1904.

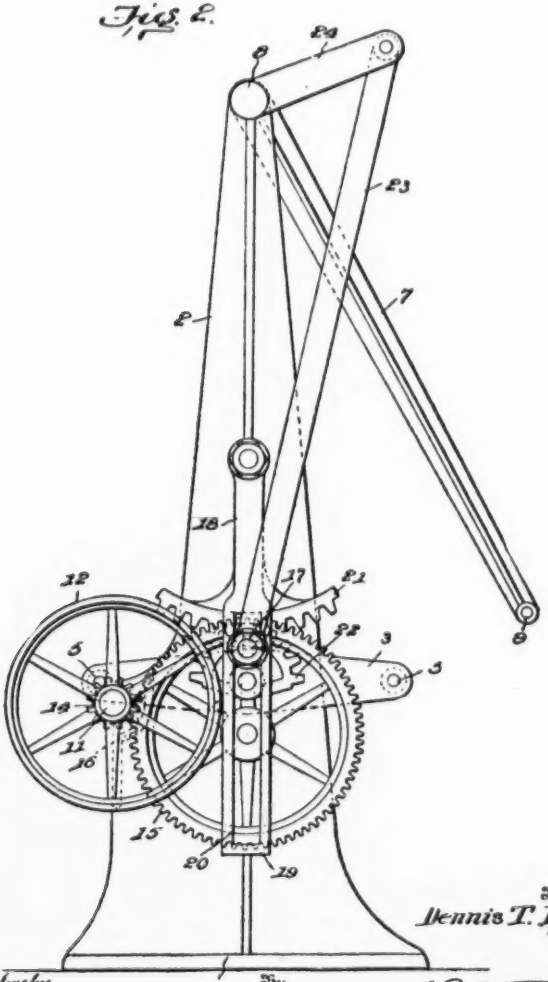
D. T. IGOU.

CANDY PULLING MACHINE.

APPLICATION FILED SEPT. 17, 1903.

NO MODEL. 4 SHEETS—SHEET 3.

Fig. 2.



No. 752,979. PATENTED FEB. 23, 1904.

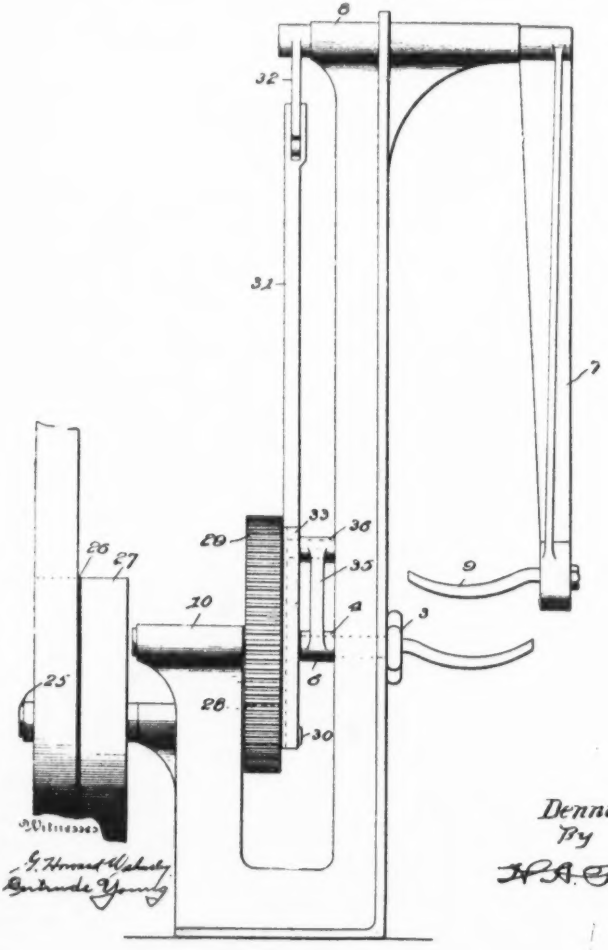
D. T. IGOU.

CANDY PULLING MACHINE.

APPLICATION FILED SEPT. 17, 1903.

NO MODEL. 4 SHEETS—SHEET 3.

Fig. 3.



Witnesses:
G. Howard Wahrly
Gertrude Young

Inventor
Dennis T. Igou,
By
H. A. Goodwin
Attorney

No. 752,979. PATENTED FEB. 23, 1904.

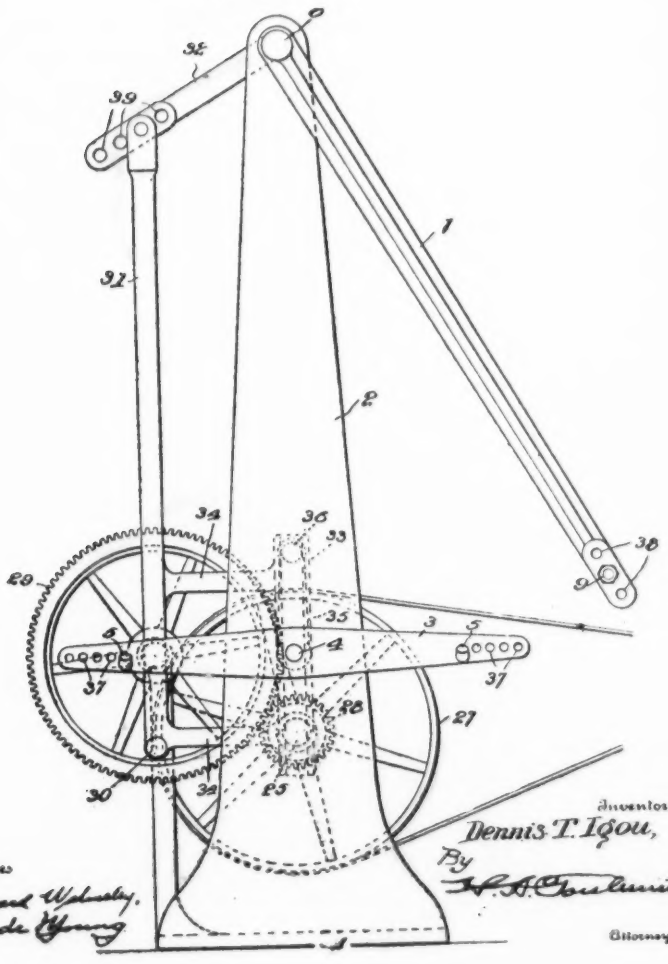
D. T. IGOU.

CANDY PULLING MACHINE.

APPLICATION FILED SEPT. 17, 1903.

NO MODEL. 4 SHEETS—SHEET 4

Fig. 4.



Witnesses
J. Howard Wyckoff.
Belinda Young

Inventor
Dennis T. Igou,
By
W. A. Coulson
Attorney

No. 752,979. Patented February 23, 1904.

UNITED STATES PATENT OFFICE.

DENNIS T. IGOU, OF SPRINGFIELD, OHIO

CANDY-PULLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 752,979, dated February 23, 1904.

Application filed September 17, 1903. Serial No. 173,500. (No model.)

To all whom it may concern:

Be it known that I, DENNIS T. IGOU, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Candy-Pulling Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to candy-pulling machines, and has for its object to provide a simple and efficient mechanism whereby the operation of pulling candy may be mechanically performed in an efficient manner.

To this end the invention consists in certain novel features, which I will now proceed to describe and will then particularly point out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a machine embodying my invention in one form. Fig. 2 is a rear elevation of the same. Fig. 3 is a side elevation of a modified form of the invention, and Fig. 4 is a front elevation of the machine shown in Fig. 3.

Referring first to the more essential features of the machine, it comprises a supporting-frame consisting of a suitable base 1 and an upright or standard 2. Mounted upon this frame or standard is an arm 3, vibrating or oscillating upon a pivotal axis 4, located between its ends, said ends having fingers 5 located on opposite sides of said pivotal axis. This arm 3 I shall term the "oscillating" arm for the purpose of identification. Its axis of motion 4 is in the form of a shaft on which said arm is secured, said shaft being mounted in a horizontal position in a suitable bearing 6 in the standard or frame 2. The fingers 5 project forward from the front face of the oscillating arm and are preferably downwardly-curved, as shown more particularly in Fig. 1.

7 indicates a vibrating arm moving on a pivotal axis 8 at one end, preferably the upper end, and provided at its other or free end with a finger 9, similar to the fingers 5. Motion is imparted to these arms in such a way that assuming that the machine starts from the position shown in Fig. 2 the fingers 5 will swing backward and forward across the path of the finger 9. In practice the finger 5 nearest the finger 9 moves upward as this latter finger approaches it, so said finger 9 passes under said finger 5. Said finger 9 passes over the second finger 5, thus passing between the two fingers in its movement from one side of the machine to the other. During the return stroke of the arm 7 the finger 9 passes under the finger 5 nearest to it, over which it passed on its outstroke and passing between the two fingers 5 passes over that one of them which it passed under at the beginning of its outstroke. The candy being laid over the fingers 5, so as to extend from one to the other when the machine is started, it will be seen that the finger 9 will work or pull the candy by passing underneath and pulling it upward at a point between the two fingers 5, on which it is supported, this pulling action occuring at each movement of the arm 7 in either direction.

The mechanism by which the movements of the arms 3 and 7 are obtained may be of any suitable description. In the form of machine shown in Figs. 1 and 2 there is mounted on a bracket 10 on the main frame a driving-shaft 11, on which are mounted fast and loose pulleys 12 and 13. Said shaft 11 is provided with a pinion 14, which meshes with a gear 15, mounted in a bearing 16 on the main frame. This gear is provided with a crank-pin 17, projecting from the rear face of the gear, in which it is mounted eccentrically. A rocker-arm 18 is pivoted at its upper end on the frame 2, and its lower end is carried down back of the rear face of the gear 15, as shown at 19. This portion of the rocker-arm is provided with a longitudinal slot 20, through which the pin 17 extends, so that as the gear 15 rotates the rocker-arm 18 vibrates. The arm 18 is provided with a gear-segment 21, which meshes with a similar segment 22 on the rear end of the shaft 4, thereby imparting an oscillating movement to the arm 3. A link 23 has its lower end pivotally mounted on the crank 17, while its upper end is pivotally connected to an arm 24, secured on the rear end of the shaft 8, which carries the arm 7, thereby imparting the necessary vibrating movement to said arm 7.

In the form of machine shown in Figs. 3 and

and 4 the driving-shaft is indicated at 25 and is provided with the fast and loose pulleys 26 and 27 and with a pinion 28. This pinion meshes with a gear 29, which is provided on its front face with a crank-pin 30, eccentrically mounted therein. On the crank-pin is journaled the lower end of a connecting-rod 31, the upper end of which is pivoted to an arm 32 on the shaft 8 of the arm 7, which is vibrated thereby. The connecting-rod 31 has secured to it, so as to move in unison therewith, a grooved bar 33, this connection being preferably effected by arms 34, connecting the upper and lower ends of said grooved bar with the connecting-rod. The shaft 4 of the oscillating arm 3 is provided at its rear end with an upwardly-extending arm 35, having a pin or projection 36, preferably provided with an antifriction-roller which travels in the grooved bar 33. In this way an oscillating movement is imparted to the arm 3.

In Figs. 3 and 4 I have also shown provision for adjusting the relations and movements of the parts. For instance, the arm 3 is provided at each end with a plurality of apertures 37 to receive the fingers 5, which may thus be adjusted nearer to or farther from the axis of motion of the arm 3. Similarly, the arm 7 is shown provided at its lower end with a plurality of apertures 38, by means of which the finger 9 may be adjusted toward and from the axis of motion of the arm 7. I have also shown the arm 32 as provided with a plurality of apertures 39, by means of which the pivotal connection of the rod 31 to said arm may be adjusted so as to vary the throw or distance traveled by the arm 7 and its finger 9.

The adjustment of the parts just described is applicable equally to the structure shown in Figs. 1 and 2.

It is obvious that various other modifications in the details of construction may be made without departing from the principle of my invention, and I therefore do not wish to be understood as limiting myself strictly to the precise details hereinbefore described, and shown in the accompanying drawings.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A candy-pulling machine comprising an oscillating arm having fingers on opposite sides of its axis of motion, and a vibrating arm provided with a finger across the path of which the fingers of the oscillating arm move, the axes of said arms being parallel and said fingers supporting the candy, substantially as described.

2. A candy-pulling machine comprising an oscillating arm having fingers on opposite sides of its axis of motion, and a vibrating arm provided with a finger across the path of which the fingers of the oscillating arm move, the finger of the vibrating arm passing between the fingers of the oscillating arm, the axes of said arms being parallel and said fingers supporting the candy, substantially as described.

3. A candy-pulling machine comprising an oscillating arm having fingers on opposite sides of its axis of motion, and a vibrating arm provided with a finger across the path of which the fingers of the oscillating arm move, the finger of the vibrating arm passing at each movement between the fingers of the oscillating arm from below upward, substantially as described.

4. A candy-pulling machine comprising an arm oscillating on a central horizontal axis and having fingers on opposite sides of said axis, in combination with a vibrating arm having at its upper end an axis parallel with and above that of the oscillating arm, said vibrating arm being provided with a finger at its lower end, the fingers of the oscillating arm moving across the path of the finger of the vibrating arm, and the finger of the vibrating arm passing between the fingers of the oscillating arm from below upward at each movement of the vibrating arm in either direction, substantially as described.

5. A candy-pulling machine comprising a rotating wheel provided with a crank-pin, a rocker-arm slotted to receive said crank-pin and provided with a gear-segment, an oscillating arm provided with fingers at its ends and a central shaft having a gear-segment meshing with that of the rocker-arm, a vibrating arm having a finger the path of which is crossed by the paths of the fingers of the oscillating arm, a shaft carrying said vibrating arm and provided with a crank-arm, and a link connecting said crank-arm with the crank-pin of the revolving wheel, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

DENNIS T. IGOU.

Witnesses:
GERTRUDE YOUNG,
G. HOWARD WALMSLEY.

Filed January 26, 1918. G. H. Marsh, Clerk.

AND, to wit, on the 11th day of September, 1917, there was duly filed in said court the deposition of Joseph P. Livermore and exhibits thereto, in words and figures as follows, to wit: [310]

In the District Court of the United States for the District of Oregon.

IN EQUITY.

HERBERT L. HILDRETH

vs.

JIM M. MASTORAS.

Boston Mass., August 27, 1917.

Deposition of Joseph P. Livermore.

TESTIMONY ON BEHALF OF THE PLAINTIFF in the above-entitled case, taken pursuant to sections 863 and 864 of the Revised Statutes of the United States as amended, before Charles W. Blood, a notary public, pursuant to the annexed notice at the office of Macleod, Calver Copeland & Dike, 350 Tremont Building, Boston, Mass.

Present: CAMERON MacLEOD, Esq., of Counsel for Plaintiff.

No one appearing on behalf of Defendant.

Direct Examination by CAMERON MacLEOD, Esq.

Q. 1. Please state your name, age, residence, and occupation.

A. Joseph P. Livermore. I am 62 years old and reside in Cambridge, Mass., and am mechanical expert having my office in Boston.

Q. 2. What has been your educational training and experience which qualifies you to testify as an expert in mechanical matters.

A. I had a technical education at the Lawrence Scientific School of Harvard University at which school I was

(Deposition of Joseph P. Livermore.)

graduated as civil engineer in 1877, having previously been graduated at Harvard College in 1875. [311] Beginning in 1879 I practised for several years as a solicitor of patents, an occupation that called for the examination of machinery and analysis and understanding of the principles of operation of machines of various kinds.

During the past thirty years or more the greater part of my time has been occupied in examining machinery of various kinds with a view to advising as to whether or not machines have matters of substantial novelty or matters that are covered by existing patents, and with a view to giving testimony on mechanical matters in patent cases. I have testified as expert in several hundred patent cases.

Q. 3. Have you testified in any case relating to candy-pulling machines, and if so please state specifically whether or not you testified as expert in the case of Hildreth vs. Lauer & Suter Co. in the district court of the United States for the district of Maryland on the patent to Herbert M. Dickinson, No. 831,501, September 18, 1906, being the patent on which the present suit is brought, in which case said patent was held to be valid and infringed as to the subject matter of the first claim.

A. I have testified in a good many cases relating to candy-pulling machines and among others I testified on behalf of the complainant in the case of Hildreth vs. Lauer & Suter Co. referred to in the question.

Q. 4. State whether or not you testified as an expert in the case of Hildreth vs. E. J. Smith Co. in the District Court of the United States for the district of Florida, in which suit was brought on the Dickinson patent and in which the first claim was also held to be valid and infringed. [312] A. I did.

Q. 5. The present case relates to a candy-pulling machine and in order that the nature of the machine may be

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(Deposition of Joseph P. Livermore.)

more readily understood will you please explain briefly the operation of pulling candy as it was performed by hand in confectionery establishments prior to the introduction of machines for that purpose.

A. The pulling operation is performed with certain kinds of confectionery in order to change the quality and texture of the product from what it would be if not subjected to the pulling operation.

In the case of molasses candy, which is usually pulled, the molasses, which is the principle ingredient, is first boiled, and if it were permitted to cool and harden after boiling, without pulling, it would be dark in color and quite dense and hard and brittle. The pulling operation lightens the color and decreases the density or increases the bulk of a given weight and greatly reduces the brittleness.

The operation of pulling as performed by hand in confectionery establishments before machines were devised and introduced for that purpose was done in connection with a single stationary pin or hook projecting horizontally at a height of about five feet above the floor.

The candy after cooking is allowed to cool until it ceases to be a liquid but is still warm and plastic.

The operator takes a mass of about 20 or 25 lbs. and first works it into a rather long sausage-like piece, perhaps two or three feet long, and then throws the middle of this piece over the pulling hook, and pulls down on the ends of the two parts, hanging from each side of the hook, stretching it to perhaps two or three times its original length. Then he lets go of the ends with one hand and with that [313] hand seizes the stretched strand about midway of its length from the hook and carries that part up over the hook thus making a new bight of the folded or lapped strand over the hook and thus shortening the length hanging from the hook, which is now seized at the lower end and pulled down again, stretching it about the

(Deposition of Joseph P. Livermore.)

same as before. This operation is repeated again and again and repeatedly stretches and laps together again the mass of candy which becomes more or less aerated and lighter in color and also much less dense or lighter in weight for a given bulk.

I introduce here a sketch or series of figures which illustrate the several steps in the hand-pulling operation as it was usually performed in confectionery establishments before the pulling machines were introduced. The brief desciption printed with the sketches will, I think, make the matter understood in connection with the description above given by me.

The sketch and printed statement produced by the witness are offered in evidence the same to be marked "Plaintiff's Exhibit Livermore Sketch No. 1."

Q. 6. Have you read and do you understand the patent to Herbert M. Dickinson No. 831,501, dated September 18, 1906, which is the patent in suit. A. Yes.

Q. 7. Please explain the construction and mode of operation of the machine shown and described in the Dickenson patent in suit.

A. As stated at the outset in the specification the machine is one designed for the pulling of candy and "adapted to mechanically pull candy so as to produce the same or better results than are usually produced by hand-pulling." [314]

The specification then goes on to state that

> "The invention consists in combining with a trough or suitable receptacle for supporting the candy to be operated upon pins or hooks adapted to travel within the said receptacle and to be shifted in the course of their travel so as to pull all portions of the candy placed within the receptacle; also, to combine with a series of pins or hooks suitable means for

(Deposition of Joseph P. Livermore.)

operating the same, substantially as hereinafter described.

"The objects of my invention are, first, to provide a machine which mechanically pulls candy in order to produce the same result as hand pulling, and in a better degree; second, to facilitate and cheapen the process of pulling; third, to furnish a machine for operation on the candy which will produce a superior article."

In the machine of the Dickinson patent the candy is supported in the trough or receptacle B while being pulled, and the pulling operation is performed by the pins or hook F F and G which are acted upon by the operating mechanism in such a manner as to give the peculiar relative movements by which the candy is repeatedly stretched or pulled and lapped, and pulled again with precisely the same effect as that of the hand pulling described in my preceding answer.

Referring to the mechanism for giving the movement to the three pins or hooks in the machine of the Dickinson patent, the pin G is stationary while the pins F are supported in the ends of an arm or lever E which is pivotally supported on a plate E' connected with the framework T provided with a nut C operated by a screw threaded shaft H adapted to be rotated by power first in one and then in the other direction.

The rotation of the shaft H in one direction thus causes the frame T to travel in one direction lengthwise of the trough B and in this movement the arm E is in such position that the two pins F pass one at each side of the pin G as indicated in Figure 2 of the drawings of the patent. [315]

Thus if the hank or batch of candy extended from one to the other of the pins F and adhered to or was wrapped around the same their effect in passing the pin G would be practically the same as the effect of the hands of the

(Deposition of Joseph P. Livermore.)

operator relative to the stationary hook in the hand-pulling operation. That is a bight would be formed over the pin G and the strand extending therefrom to each of the pins F would be stretched as the pins F moved away from the pin G after passing the same.

In order to lap the strands thus pulled and present the thus shortened batch or bank for another pulling operation, the arm or lever E is turned on its pivot at the beginning of the next stroke in the reverse direction past the pin G and in this movement one of the pins F passes across the space between the other pin F and the pin G and thus laps the portion between the pin G and one of the pins F against the portion between the pin G and the other pin F, and makes the pins F thus present a new lapped portion to be engaged by the pin G when the pins F pass the same in their reverse stroke, at the end of which or rather the beginning of the next following stroke, the pins F are again swung around the pivot connecting the arm E with the plate E′ so that now the other of the two pins F passes between the pin G and one of the pins F and again laps the stretched strands together and presents them in a new position to be acted upon by the pin G in the next stroke of the pins F past the said pin G.

The relative movement or change or position of the three pins therefore is such that in a complete cycle of operation of the machine one of the pins passes through the space between the other two and then another of the pins passes through the space the other two, and then another, each pin at one phase of the operation passing between two others, and at [316] another phase of the operation being one of the pairs between which the third one is passing.

In bringing about this relative movement or change of position it is immaterial what the actual movements are, and, for example, instead of having the pin G stationary

(Deposition of Joseph P. Livermore.)

and the pins F travel past it, the pins F might be stationary while the pin G was passing through the space between them, the effect on the candy extending from one to the other of the pins F being of course precisely the same.

Such variation together with the indication that the specific actuating mechanism shown is not essential to the machine of the Dickinson patent is set forth in the first paragraph on page 2 of the specification, which is as follows:

> "I have illustrated and described band pulleys and a screw threaded shaft as the means for operating the candy hooks within the receptacle which holds the batch of candy; but any other suitable means may be used. I have also shown in the drawings a trough for supporting the candy, but any suitable support may be used which has the capacity for supporting the candy while it is being operated upon, as hereinbefore described. I have also illustrated and described a stationary hook or pin and two travelling shifting pins, but I do not wish to be understood as limiting my invention to such an arrangement since my invention could be applied in a device where the candy hook moves back and forth and where the pins or hooks although having a shifting action are relatively stationary. In either case the candy is acted upon in a manner and by means of the shifting hook along a path corresponding to what I term a figure –'8.' I have also used the terms 'pins' and 'hooks'—that is I have made use of them merely for the purpose of description—and while these terms were found in the claims I desire to have them construed as embracing any form of device to perform the functions given by said pins or hooks."

In the above-quoted paragraph the patentee states that the candy is acted upon by the shifting hooks along a path

(Deposition of Joseph P. Livermore.)

corresponding to what he terms a Figure –8. With the actual movement described none of the pins or hooks would move in a path [317] closely resembling the figure 8, but the relative movement of the three pins in passing and being passed by one another would be the same as that which would result if a single pin or hook moved in a path such as would describe a figure 8 while the other two pins were stationary, one in each of the two loops or circles of which the figure 8 is composed.

A single pin travelling in a figure 8 path around two stationary pins in order to produce the same relative movement as that of the three pins in the Dickinson machine, constructed specifically as shown in the patent, would have to be a continuous movement passing around one of the stationary pins in the direction of movement of the hands of a clock, and around the other pin in the opposite direction.

The movement actually shown in the Dickinson patent thus corresponds to a movement in a figure 8 path in the sense that it effects the same relative passages of one pin across through the space between two other pins throughout the entire cycle of movement as would be effected if a single pin travelled in an actual geometrical figure 8 path relative to two stationary pins one in each of the closed loops that make up the figure 8.

Q. 8. Claim 1 of the Dickinson patent refers to the candy hooks and puller and means for producing "a specified relative in and out motion of these parts for the purpose set forth." You have sufficiently described the relative movement of the pins or hooks in the machine of the Dickinson patent, but will you please now state briefly just what is the "relative in and out motion" of the candy hooks and puller in the machine of the Dickinson patent? [318]

A. It is a movement such that in a complete cycle or round of operations one of the pins first passes through

(Deposition of Joseph P. Livermore.)

the space between the other two, or what amounts to the same thing the other two pass by, one at each side of the first mentioned pin, and later in the cycle of operation the pin which thus passed through between two others becomes one of the two between which the third one passes.

In the complete operation each one of the pins at one time passes between the other two and at another time is one of the two between which the third one is passing.

To facilitate the understanding of the essential movements of the hooks or pins without regard to the specific mechanism employed for actuating them or driving them in those movements, I now produce a diagram showing the several phases in a cycle of operation of the pins or hooks of the machine of the Dickinson patent, and to avoid confusion I have marked the three pins a, b, and c, and have put arrows adjacent to each to show the movement which they are just beginning to make when in the position shown in each of the figures.

In Fig. 1 the pins *a* and *b* are about to make their stroke past the pin *c* in the direction from left to right, at the end of which stroke they will arrive at the position shown in Fig. 2. In this movement a batch of candy extending from *a* to *b* and wrapped around and adhering to each will be engaged by the pin *c* and pulled out into two strands as shown in Fig 2. [319]

In Figure 2 the movement is beginning in which the pin *a* passes through between pins *b* and *c*, coming to the position shown in Fig. 3. In this movement the part rfom *a* to *c* will be lapped against the part from *c* to *b* as shown in Fig. 2, and a new strand from *a* to *b* will be presented for the next action of the pin *c*.

In Figure 3 the pins *ab* are just beginning their movement past the pin *c* from right to left bringing them to the position shown in Fig. 4. In this movement the part from *a* to *c* has been lapped against the part from *a* to *b* and the parts from *a* to *c* and from *b* to *c* have been stretched as shown in Fig. 4.

(Deposition of Joseph P. Livermore.)

In Figure 4 the movement is beginning in which the pin *b* passes through the space between pins *a* and *c* and comes to the position shown in Fig. 5. In this movement the part between *b* and *c* is lapped against the part between *a* and *c* which latter is stretched.

Figure 5 is the same as Figure 1 being the beginning of a new cycle of operation such as represented in Figs. 1, 2, 3, and 4, and the operations will be the same as has been described except that instead of acting on the single strand such as represented in Fig. 1 as the starting of the operation they will act upon the bunch or hank or lapped strands such as shown in Fig. 5 and will stretch out the several components and lap them again.

It may be noticed that the single length or strand from *a* to *b* shown in Fig. 1 has been converted by the cycle of operation into seven strands as shown in Fig. 5, three between *a* and *b* and four between *b* and *c*. In the next cycle these seven would be converted into forty-nine and in the next to seven times forty-nine and so on. [320]

Of course in the lapping operation these strands adhere together and do not form separate fibres but as a matter of fact in the pulling operation after a comparatively few cycles an original length from one to the other if two pins will have been stretched to many thousands times that length and bunched or lapped into a hank as the stretching proceeds.

The sketch referred to by the witness in the previous answer is offered in evidence, the same to be marked Plaintiff's Exhibit Livermore Sketch No. 2.

Q. 9. It is alleged in defendant's answer in this case that defendant's machine is substantially like the machine shown and described in the patent of J. M. Mastoras, assignee of G. L. Langer, No. 1,232,697, dated July 10, 1917. Please explain the construction and mode of operation of the machine shown and described in the said Langer patent.

(Deposition of Joseph P. Livermore.)

A. The said patent, which I will call the Langer patent, shows and describes a candy-pulling machine which in its operation produces substantially the same effect upon the candy as the operation of hand pulling.

The Langer patent states at the outset that the "invention relates to candy-pulling machines, and more particularly to a machine adapted to automatically pull candy by means of a floating puller which is carried through a course of travel corresponding in form to the figure 8, and around fixed supporting pins arranged concentrically within the two circular portions of said Figure 8, whereby the candy is pulled by the said floating puller and alternately carried thereby around said fixed supporting pins." In the machine of the Langer patent there are three pins or pulling members, all of which act upon the candy in the pulling operation, the movement [321] of one of the pins relative to the others being such that the candy is repeatedly pulled or stretched and lapped as the operation proceeds. As appears from the above quoted statement from the specification, the actual movement in the Langer machine is the figure 8 movement to which the movement shown in the Dickinson patent is said to correspond.

Instead of having a single stationary pin and two other pins which move relatively to it and to one another, the machine of the Langer patent has two stationary pins and a third one which moves relatively to both of them in an actual Figure 8 path. The machine shown in the Langer patent is what may be called a double machine having the driving mechanism at the middle and two sets of pins, one projecting from each side of the driving mechanism and each adapted to operate to pull a batch of candy so that two batches may be pulled at the same time. Each set of pulling hooks is, however, entirely independent of the other, and would perform its operation just the same

(Deposition of Joseph P. Livermore.)

whether the other was present or not, and consequently it is sufficient to consider the construction and mode of operation involved in the action of one of the sets of pins or hooks projecting from one side of the machine.

Referring to the drawings of the patent the two stationary pins are marked 8 and 9 and they are located at the centres of two rotating carriers or actuators 10 and 11 made in the form of gears meshing together so that they rotate in opposite directions, said carrying gears being provided with sockets 11a to engage the third or movable pin 12 which is engaged by one or the other of said sockets and by it carried around the stationary pin 8 or 9 at the centre of the carrying gear by which the said movable 12 [322] is engaged.

Provision is made by a switching device 15 for transferring the pin 12 from the action of one of the carrying gears to the other so that in the continuous operation of the machine starting at the point shown in Fig. 1, for example, the pin 12 is first carried by the gear 11 around the right-hand stationary pin 9 in the direction of rotation of the hands of a clock and is then carried by the gear 10 around the left-hand stationary pin 8 in the direction opposite to the rotation of the hands of a clock. The result of this operation is that in a complete cycle of movement of the machine involving two rotations of the gears 10 and 11 the pin 12 first passes up through the space between the stationary pins 8 and 9, then passes down at the right of the pin 9 (giving the same effect as if the pin 9 moved up through the space between the pins 8 and 12), then passes up again through the space between the pins 8 and 9 and then passes down at the left of pin 8, giving the same effect as if pin 8, passed up through the space between the pins 9 and 12, after which the pin 12 arrives at the beginning of the next cycle and again passes up through the space between pins 8 and 9 and so on repeat-

(Deposition of Joseph P. Livermore.)

ing the previously described cycle. The action on the candy is thus exactly the same as that shown in the Exhibit Livermore Sketch No. 2, for referring to Fig. 1 of said sketch it obviously makes no difference whether *c* stands still and *a* and *b* move past it toward the right or *a* and *b* stand still and *c* moves past and through the space between them toward the left. In either case the strand extending from *a* to *b* will be engaged and pulled or stretched by the pin *c* to the condition shown in Fig. 2.

Similarly in Fig 2 it will make no difference whether *c* and *b* stood still while *a* passed through between [323] them, or *a* and *b* stood still while *c* passed down and toward the right around *a*. In either case the effect would be to bring the strands of candy to the position relative to *a* and *b* and *c* which is shown in Fig. 3 with the strands between *a* and *c* lapped.

Similarly at Fig. 3 it makes no difference whether *c* moves to the right through the space between *a* and *b* or *a* and *b* move to the left past *c*. In either case the result on the candy is what is represented in Fig. 4 with three strands lapped between *a* and *c* and a single strand between *b* and *c*. At Fig. 4 it makes no difference whether *b* passes up between *a* and *c* or *c* passes down and toward the left around *b*. In either case the result on the condition of the candy is what is represented in Fig. 5.

Q. 10. Will you please state briefly just what the nature of the movement of the candy hooks or supports is in the machine of the Langer patent which you have just described and their action upon the candy in the operation of the machine.

A. It is a relative in and out movement such that in effect each pin at one time in a cycle of operation passes through the space between the two other pins and at another time in said cycle is one of the two pins between which the third one is passing.

I say that the movement is such *in effect* because it

(Deposition of Joseph P. Livermore.)

might not be perhaps strictly accurate in language to refer to a stationary pin as having a movement or as passing between two others. Referring however to the pins shown in the Langer patent it will be recognized that when the pin 12 is passing down at the right of the pin 9 the effect is the same as if pin 9 passed up through the space between the pins 8 and 12, and similarly when pin 12 passes down at the left of pin 8 the effect is the same as if pin 8 actually [324] moved up through the space between pins 9 and 12.

Consequently, in effect, in a single cycle of operations 12 first passes between 8 and 9, then 9 passes between 8 and 12, then 12 passes between 8 and 9 again, and then 8 passes between 9 and 12, just as on Exhibit Livermore Sketch No. 2 *c* first passes between *a* and *b* (although the actual movement is that of *a* and *b* past *c*, which itself has no actual movement); then *a* passes between *b* and *c*; then *c* passes between *a* and *b* and then *b* passes between a and *c*.

Q. 11. Is there any difference in mode of operation upon the candy or in the result produced, where a single pin moves in an actual Figure 8 path relative to two stationary pins, one in each loop of the Figure 8, or three pins have the relative movement shown and described in the Dickinson patent and in which it is stated that the candy is acted upon along a path corresponding to what the patentee terms a Figure 8.

A. There is not.

End of direct examination.

No cross-examination.

Deposition closed.

JOSEPH P. LIVERMORE.

Counsel for the plaintiff offers in evidence a certified copy of the United States Letters Patent No. 831,501 to Herbert M. Dickinson, being the letters patent in suit, and the same is marked Plaintiff's Exhibit—Plaintiff's Patent in Suit; also a certified copy of United States Let-

ters Patent No. 1,232.697, to Gotthold L. Langer and the same is marked Plaintiff's Exhibit—Defendant's Patent. [325]

State of Massachusetts,
County of Suffolk,—ss.

I, Charles W. Blood, a notary public, in and for the said county and state, do hereby certify that on the 27th day of August, 1917, I was attended by the witness Joseph P. Livermore, who being by me cautioned and sworn to tell the truth and nothing but the truth in a case pending in the District Court of the United States for the District of Oregon, between Herbert L. Hildreth and Jim M. Mastoras, did depose and say as by his deposition hereto annexed doth appear.

And I do further certify that I was attended by Cameron Macleod, Esq., of counsel for the plaintiff, and that no one appeared representing the defendant; and I do further certify that the said deposition was reduced to typewriting in my presence and that of the witness by Alice H. Morrison, and that after the witness had fully examined the same he signed it as above appears.

And I do further certify that the said witness resides more than one hundred miles from the place of trial, to wit, in Cambridge, in the state of Massachusetts.

I further certify that notice was given to defendant's counsel of the taking of said deposition as by the original of said notice hereto annexed.

And I do further certify that I am not of counsel to said parties, nor related by blood or marriage to any of the nor interested directly or indirectly in the matter in controversy.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Boston in said county this 31st day of August, 1917.

[Seal] CHARLES W. BLOOD,
Notary Public.

Filed Sept. 11, 1917. G. H. Marsh, Clerk. [326]

Plaintiff's Exhibit—Plaintiff's Patent in Suit.

UNITED STATES OF AMERICA.
DEPARTMENT OF THE INTERIOR.
UNITED STATES PATENT OFFICE.

To all to Whom These Presents Shall Come, GREETING:

THIS IS TO CERTIFY that the annexed is a true copy from the records of this office of the

Letters Patent of
Herbert M. Dickinson, Assignor, by mesne assignments to
Herbert L. Hildreth,

Number 831,501 Granted September 18, 1906.

for

Improvement in Candy-pulling Machines.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this eleventh day of August, in the year of our Lord one thousand nine hundred and seventeen, and of the Independence of the United States of America the one hundred and forty-second.

[Seal] F. W. H. CLAY,
Acting Commissioner of Patents. [327]

No. 831,501.

THE UNITED STATES OF AMERICA.

To all to Whom These Presents Shall Come:

Whereas, Herbert M. Dickinson of Grand Rapids, Michigan, has presented to the Commissioner of Patents a petition praying for the grant of letters patent for an alleged new and useful improvement in Candy-pulling Machines, he having assigned his right, title, and interest, in said improvement, by mesne assignments, to Herbert L. Hildreth, of Boston, Massachusetts, a description of which invention is contained in the specification of which

a copy is hereby annexed and made a part hereof, and has complied with the various requirements of law in such case made and provided; and

Whereas upon due examination made the said claimant is adjudged to be justly entitled to a patent under the law;

Now, therefore, these letters patent are to grant unto the said Herbert L. Hildreth, his heirs or assigns, for the term of seventeen years from the eighteenth day of September, one thousand nine hundred and six, the exclusive right to make, use, and vend the said invention throughout the United States and the Territories thereof.

In Testimony Whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed, at the city of Washington, this eighteenth day of September, in the year of our Lord one thousand nine hundred and six and of the Independence of the United States of America the one hundred and thirty-first.

[Seal] E. B. MOORE,
Acting Commissioner of Patents. [328]

Specifications and Drawings of Patent No. 831,501, are omitted from this transcript, being the identical Specifications and drawings of patent No. 831,501, appearing as a part of Plaintiff's Exhibit 13, on page 264 of this transcript. [329]

United States District Court, District of Oregon. In Equity. Herbert L. Hildreth vs. Jim M. Mastoras. "Plaintiff's Exhibit — Plaintiff's Patent in Suit." Charles W. Blood, Notary Public. Filed September 11, 1917. G. H. Marsh, Clerk. [330]

Plaintiff's Exhibit—Defendant's Patent.

UNITED STATES OF AMERICA.
DEPARTMENT OF THE INTERIOR.
UNITED STATES PATENT OFFICE.

To all to Whom These Presents Shall Come, GREETING:

This is to certify that the annexed is a true copy from the records of this office of the

Letters Patent of
Gotthold L. Langer, Assignor to
J. M. Mastoras,

Number 1, 232,697 Granted July 10, 1917

for

Improvement in Candy-pulling Machines.

In Testimony Whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this eleventh day of August, in the year of our Lord one thousand nine hundred and seventeen, and of the Independence of the United States of America the one hundred and forty-second.

[Seal] F. W. H. CLAY,
Acting Commissioner of Patents. [331]

No. 1,232,697.

THE UNITED STATES OF AMERICA.

To All to Whom These Presents Shall Come:

WHEREAS Gotthold L. Langer, of Portland, Oregon, has presented to the Commissioner of Patents a petition praying for the grant of letters patent for an alleged new and useful improvement in CANDY-PULLING MACHINE, he having assigned his right, title, and interest in said improvement to J. M. Mastoras, of Portland, Oregon, a description of which invention is contained in the specification of which a copy is hereunto annexed and

made a part hereof, and has complied with the various requirements of law in such case made and provided, and

WHEREAS upon due examination made the said claimant is adjudged to be justly entitled to a patent under the law

Now, Therefore, these LETTERS PATENT are to grant unto the said J. M. Mastoras, his heirs or assigns for the term of seventeen years from the tenth day of July, one thousand nine hundred and seventeen, the exclusive right to make, use, and vend the said invention throughout the United States and the territories thereof.

In Testimony Whereof, I have hereunto set my hand and caused the seal of the PATENT OFFICE to be affixed at the city of Washington this tenth day of July, in the year of our Lord one thousand nine hundred and seventeen, and of the Independence of the United States of America the one hundred and forty-second.

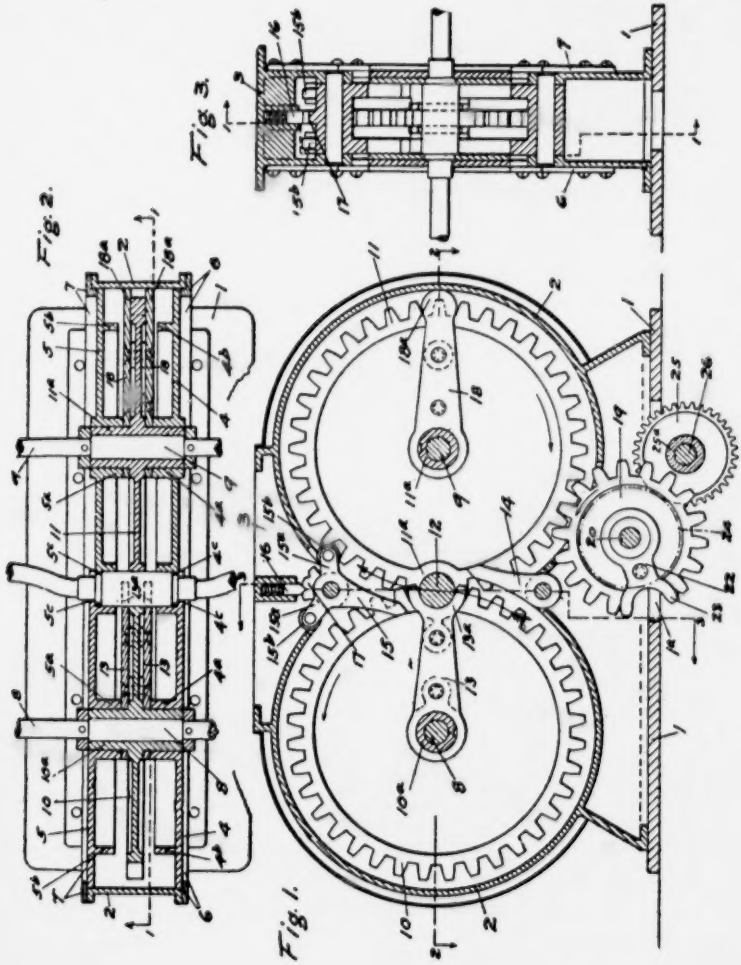
[Seal] F. W. H. CLAY,

Acting Commissioner of Patents. [332]

G. L. LANGER.
CANDY PULLING MACHINE.
APPLICATION FILED OCT. 9, 1916.

1,232,697. **Patented July 10, 1917.**

2 SHEETS—SHEET 1.



Witnesses:
J. Ostrom
I. M. Griffin.

Gerhard L. Langer
Inventor.
By
Atty.

G. L. LANGER.
CANDY PULLING MACHINE.
APPLICATION FILED OCT. 9, 1916.

1,232,697.

Patented July 10, 1917.
2 SHEETS—SHEET 2.

Fig. 5.

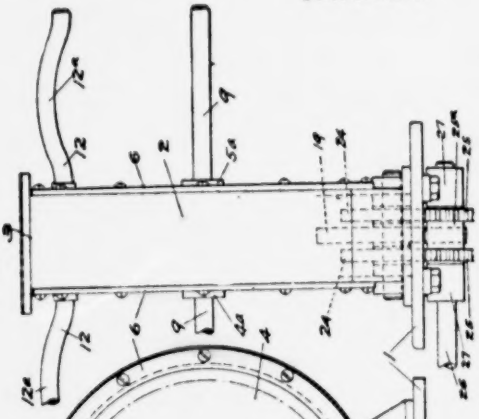


Fig. 4.

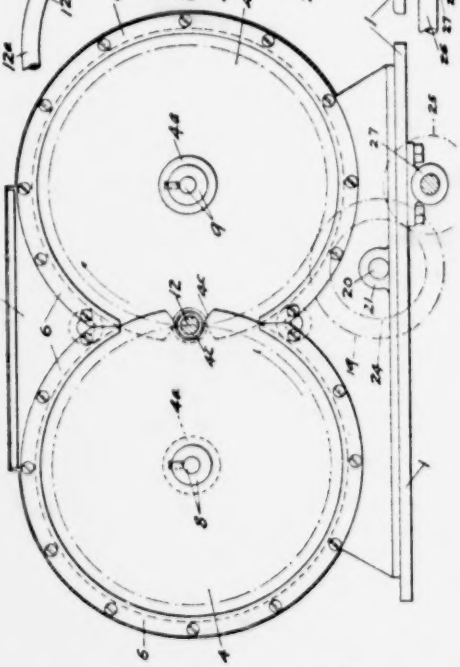
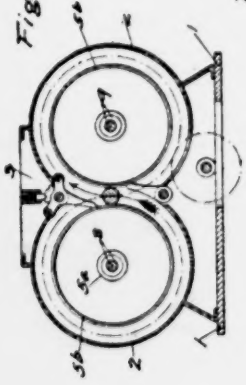


Fig. 6.



Witnesses:
J. A. Strong
S. M. Griffin

Gotthold L. Langer, Inventor.
By [illegible] Atty.

UNITED STATES PATENT OFFICE.

GOTTHOLD L. LANGER, OF PORTLAND, OREGON, ASSIGNOR TO J. M. MASTORAS, OF PORTLAND, OREGON.

CANDY-PULLING MACHINE.

1,232,697. Specification of Letters Patent. **Patented July 10, 1917.**

Application filed October 9, 1916. Serial No. 124,563.

To all whom it may concern:

Be it known that I, GOTTHOLD L. LANGER, a citizen of the United States, residing in the city of Portland, county of Multnomah, and State of Oregon, have invented certain new and useful Improvements in Candy-Pulling Machines, of which the following is a specification.

My invention relates to candy pulling machines, and more particularly to a machine adapted to automatically pull candy by means of a floating puller which is carried through a course of travel corresponding in form to the figure 8, and around fixed supporting pins arranged concentrically within the two circular portions of said figure 8, whereby the candy is pulled by said floating puller and alternately carried thereby around said fixed supporting pins.

So far as I am aware, I am the first to provide in a machine of the character referred to a floating pulling or carrying member adapted to be carried first around one circular course in one direction, and then around another circular course in the opposite direction, with means for holding and carrying said puller or carrying member, in the manner indicated.

In order that others may understand my invention I have illustrated the preferred form thereof in the accompanying two sheets of drawings, which I will now describe.

Figure 1 is a vertical, sectional view through the preferred embodiment of my invention, taken on the lines 1—1, on Figs. 2 and 3;

Fig. 2 is a horizontal sectional view through the machine on a line corresponding to line 2—2, Fig. 1;

Fig. 3 is a vertical cross sectional view of the invention, substantially on the line 3—3, of Fig. 1;

Fig. 4 is a side elevation of the machine with the floating puller or carrier shown in section;

Fig. 5 is an edge or end view thereof, with parts broken away to reduce the size of the figure; and

Fig. 6 is a vertical longitudinal sectional view through the casing with the gears removed to more clearly illustrate the course of travel of the floating puller or carrier member.

Referring now more in detail to the drawings my invention comprises a base 1, upon which are supported two circular, or drum-like, casings 2—2, joined together at one side, and in open communication with each other, as clearly illustrated in the drawings, said casing being formed together and provided at their upper side with a connecting portion 3. Revolubly mounted in the opposite sides of each of said drums are side disks, or closures, 4—4 and 5—5, held in place by detachable side rims 6—6, and 7—7, said side disks having formed centrally thereof bearing sleeves, or boxes, as 4^a—4^a, and 5^a—5^a, shown clearly in the horizontal sectional view, Fig. 2, said side disks, or members, also having formed on their inner faces inwardly projecting annular flanges, as 4^b—4^b and 5^b—5^b, whereby circular passageways are formed between said flanges and the body of the drums, or casings, 2—2, as will be clear from Fig. 6.

Mounted in said bearing boxes 4^a—4^a and 5^a—5^a, are two shafts, or pins, 8 and 9, which project through the sides of said casing, as will be understood from Figs. 2, 3 and 5. Mounted upon the middle portions of said shafts, or rods, 8 and 9, within the drums, or casings 2—2, are two large gears 10 and 11, having long hubs, as 10^a and 11^a. Said side disks, or members, 4—4 and 5—5, and said gears 10 and 11, and said shafts 8 and 9, are all secured to turn together within said drums, or casings, said gears meshing with each other through the adjacent open sides of the drums, or casings, 2—2, as clearly seen in Fig. 1. The gear teeth of said gears 10 and 11, it will be noted, project into the annular passageways formed within the drums, or casings, 2—2, and around the outside of the inwardly projecting flanges 4^b—4^b and 5^b—5^b, on the revolving side members of the casing.

Said gears 10 and 11, each has formed at one place in its rims, in place of the teeth, a half round socket, as 11^a, Fig. 1, which when the gears come together with these corresponding sockets in register with each other, as seen in Fig. 1, a round socket is formed between the meeting gears sufficient in size to encircle and carry what I will call a floating puller, or carrier, 12, comprising a rod, or shaft extending through the drum, or casing, 2, and at opposite sides thereof, to a distance corresponding in length to the rods, or shafts, 8—8 and 9—9, said floating carrier 12, being preferably bowed at its oppo-

site ends, as at 12^a—12^a, Fig. 5. The side members, or disks, 4—4 and 5—5, have also formed in their peripheries as at 4^a—4^a and 5^a—5^a, Fig. 4, cooperating sockets adapted to fit around said floating carrier 12, as it passes between the meeting edges of said side disks or members, it being understood that the sockets formed in the gears 10 and 11, and the sockets formed in the side disks, or members, 4—4 and 5—5, come together in register with each other, as seen in Figs. 1, 2 and 4, once in each revolution of said gears and said side members, whereby to carry said floating carrier 12, between said gears 10 and 11, which are in mesh with each other.

In order to more steadily support and guide said floating carrier 12, there is mounted on the hub 10^a, of the gear 10, at opposite sides of the gear 10 and secured thereto, a pair of arms 18—18, shown in side view in Fig. 1, and in section in Fig. 2, said arms being provided at their outer ends with forks 13^a, adapted to fit around said floating carrier 12, as it is carried around said gear 10, within the guide way formed between the flanges 4^b and 5^b and the inside of the drum 2. Pivotally mounted through the casing, or drum 2, at the lower side of the juncture thereof, on opposite sides of the gears 10 and 11, are pivoted switch levers, as 14, adapted to be moved from one side to the other, by said floating puller, whereby to direct the course of travel of said floating carrier 12, in a manner hereinafter referred to.

Also pivotally mounted in the upper side of the juncture between said drums, or casings 2—2, is another pair of switch levers, as 15, each having two projecting ears, as 15^a—15^a, provided with rollers 15^b—15^b, as shown, whereby said switch levers 15, are moved from one side to the other by said floating carrier 12, as it is carried through the passageway, referred to, within one or the other of said drums, or casings. A spring-pressed plunger 16, is mounted in the connecting web, or box, 3, between said casings, and has a yielding, frictional engagement with a notched lug 17, formed as a part of said switch levers 15. Mounted on the opposite sides of the gear 11, on its hub 11^a, are two arms 18—18, corresponding with the arms 13—13, at the opposite sides of the gear 10, excepting that the outer ends of the arms 18—18, are provided with rounded end portions, as 18^a, projecting slightly beyond the teeth of the gear 11, as will be clear from Figs. 1 and 2. The gear 10, is driven from the gear 11. The gear 11 is driven by a pinion 19, mounted on a shaft 20, having its bearings mounted on the base 1, as at 21, Fig. 4, said gear running through an opening 1^a, in the base 1, as seen in Fig. 1, said pinion 19, being provided on its opposite sides with short arm members 22, provided with a fork, as 23, corresponding in shape to the forks 13^a, at the outer ends of the arms 18, for the purpose of receiving the floating carrier 12, as it passes between the large gear 11, and said pinion 19. Mounted on the shaft 20, at opposite sides of the pinion 19, are two gears 24—24, adapted to mesh with two gears 25—25, on a common hub 25^a, on a shaft 26, mounted in the bearing boxes 27—27, on the under side of the base 1, said machine being driven by any suitable power applied to said shaft 26. It will be evident that the function of the arms 18—18, having the round heads 18^a—18^a, at opposite sides of the gear 11, is to make a proper mesh with the fork 23, on the pinion 19, when said gear and said pinion come together at these points at a time when the floating carrier 12, is in some other part of its course of travel.

The use and operation of my invention may be briefly described as follows:

As the pins 8 and 9, project at opposite sides of the machine, through the centers of the respective drums, or casings, and the floating pin, or puller member, 12, also projects from the opposite sides of said casing, it will be evident that a batch of candy to be pulled can be laid upon the projecting pins 8, 9 and 12, on either side of the machine, or that two batches of candy to be pulled can be placed upon said pins, one batch on each side of the machine. Assuming that the batch of candy has been stretched across the pins 8 and 9, and the puller member 12, while it is in a position in horizontal alinement with the pins 8 and 9, it will be evident that as the machine is operated through the main driving shaft 26, that the floating puller 12, will move upwardly from its position shown in Figs. 1 and 6, and around the pin 9, as indicated by the arrows, carrying the middle portion of the candy around the pin 9. As the floating puller 12, passes the projecting arm 15^a, of the switch member 15, it will move said switch member over to the right of the center line of the machine, whereupon as said puller member comes around to its middle, or starting position, it will be directed to the left, around the pin 8, pulling and stretching the candy carried thereby at its outer ends around the outer ends of the pin 8. As said floating puller 12, starts around to the left with the large gear 10, it will engage the short arm 15^a, of the switch 15, and move it over to the left again, in the position shown in full lines, whereupon as said floating puller comes again to its middle or starting position it will be directed again around the pin 9, with the large gear 11. Thus said floating puller is alternately carried around the pin 9, by the socket 11^a, in the large gear 11, and around the pin 8, by the forks 13^a, in the ends of the arms 18, which are secured to the large gear 10. This

movement laps the candy around the pin 9, then stretches it and laps it around the pin 8, and then stretching it again laps it around the pin 9, pulling and stretching the candy as the floating puller 12, is carried through its course of travel, corresponding to the figure 8.

I am aware that changes can be made in my invention as here illustrated, without departing from the spirit thereof, and I do not, therefore, limit my invention to the particular embodiment thereof here shown and described, except as I may be limited by the hereto appended claims.

I claim:

1. In a candy pulling machine, in combination, a supporting structure, supporting pins projecting therefrom at a space apart, a floating pin, or puller, supported in and projecting from said structure, and means for carrying said floating pin, or puller, alternately around said supporting pins, said supporting and floating pins having their supporting attachments in substantially the same plane and all projecting therefrom in the same direction.

2. In a candy pulling machine, in combination, a supporting structure, supporting pins projecting therefrom in parallel relationship with each other and at a space apart, a floating pin, or puller, supported in and projecting from said structure, and means for carrying said floating pin, or puller, alternately around said supporting pins in substantially parallel relationship therewith, said supporting and floating pins having their supporting attachments in substantially the same plane and all projecting therefrom in the same direction.

3. In a candy pulling machine, in combination, a supporting structure comprising two drum-like casings joined together edgewise, a supporting pin supported centrally in each of said casings and projecting axially from the side thereof, a floating pin, or puller, movably supported in said casings and projecting from the side thereof in the same direction and in substantial parallel relationship with said supporting pins, and means within said casings for carrying said floating pin, or puller, first around one of said supporting pins and then around the other of said supporting pins in an opposite direction, whereby said floating pin, or puller, moves through a course of travel corresponding to a figure 8 around said supporting pins.

4. A candy pulling machine comprising in combination a supporting structure, a casing, two large gears revolubly supported in said structure, in mesh with each other, a supporting pin projecting axially from each of said gears through the side of said supporting structure, a floating pin, or puller, movably supported in said structure, and means on said gears for carrying said floating pin, or puller, first by one gear around its supporting pin and then by said other gear in an opposite direction around its supporting pin, whereby said projecting floating pin, or puller, is carried alternately, in opposite directions, around said projecting supporting pins, substantially as described.

5. In a machine of the character referred to, in combination, a casing, a pair of supporting pins with means for supporting the same at a space apart in substantial parallel relationship with each other, a floating pin, or puller, means for supporting the same in substantial parallel relationship with said supporting pins and for carrying it first around one of said supporting pins and then around the other of said supporting pins, in opposite directions, said supporting pins and said floating pin having their middle portions supported between the sides of said casing with their opposite ends projecting through the opposite sides thereof and means for automatically changing the course of travel of said floating pin, or puller, whereby it is directed first around one of said supporting pins and then around the other of said supporting pins in an opposite direction, substantially as described.

6. In a machine of the character referred to, in combination, a casing, two supporting members supported therein at a space apart, a floating puller member movably supported, means for carrying the same bodily through two circular courses of travel, first around one of said supporting members at a space therefrom, and then around the other of said supporting members at a space therefrom, and in an opposite direction, and a switch member movably interposed at the inner section of said courses of travel, and means for automatically and alternately moving the same from one side to the other, whereby to alternately change the direction of travel of said floating member, substantially as described.

Signed at Portland, Multnomah county, Oregon, this 29th day of September, 1916.

GOTTHOLD L. LANGER.

In presence of—

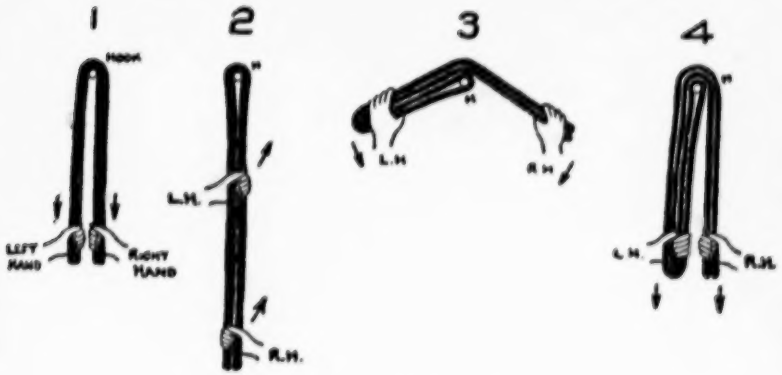
I. M. GRIFFIN,

J. C. STRENG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

[Endorsed on back]: District Court of the United States, District of Oregon. In Equity. Herbert L. Hildreth vs. Jim M. Mastoras. "Plaintiff's Exhibit—Defendant's Patent." Charles W. Blood, Notary Public. Filed September 11, 1917. G. H. Marsh, Clerk. [337]

Plaintiff's Exhibit Livermore Sketch No. 1.



HAND PULLING.

1. Hank has bight over hook. Right and left hands pull on free ends of hank.
2. Right hand holds and lifts united free ends. Left hand lets go and seizes lapped strands about one-third distance from hook, forms bight and carries it up around over hook.
3. New bight of lapped strands is formed over hook, and left hand and right hand bring together free ends of this new bight.
4. Free ends of new bight pulled by both hands as at No. 1 and new cycle begun.

Note. Characteristic of hand operation that hands let go and take fresh grasp in each cycle of operations. Hands pull free ends by grasping them.

Plaintiff's Exhibit Livermore Sketch No. 1. Charles W. Blood, Notary Public.

Filed September 11, 1917. G. H. Marsh, Clerk. [338]

Plaintiff's Exhibit Livermore Sketch No. 2.

Fig. 1.

Fig. 2.

Fig. 3.

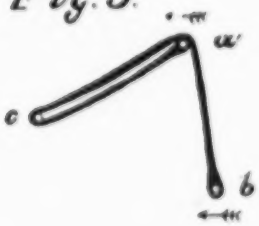


Fig. 4.

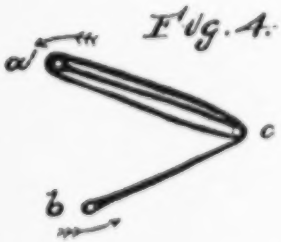
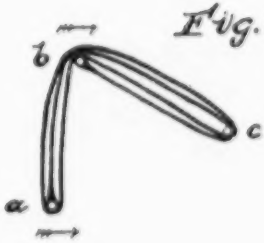


Fig. 5.



Plaintiff's Exhibit Livermore Sketch No. 2. Charles W. Blood, Notary Public.
Filed September 11, 1917. G. H. Marsh, Clerk. [339]

AND AFTERWARDS, to wit, on Friday, the 11th day of April, 1919, the same being the 35th judicial day of the regular March term of said Court—Present, the Honorable CHARLES E. WOLVERTON, United States District Judge, presiding—the following proceedings were had in said cause, to wit: [340]

In the District Court of the United States for the District of Oregon.

No. 7466.

April 11, 1919.

HERBERT L. HILDRETH

vs.

JIM M. MASTORAS.

Order Re Transmission of Original Exhibits.

Now, at this day, on motion of Mr. Joseph L. Atkins, of counsel for the defendant in the above-entitled cause, it is ORDERED that the clerk of this court transmit to the United States Circuit Court of Appeals for the Ninth Circuit with the transcript of record on appeal in this cause the following original exhibits, viz: Plaintiff's Exhibit 10, which is also Defendant's Exhibit "B," Plaintiff's Exhibits 11, 17, 18, 19, and 20.

CHAS. E. WOLVERTON,
Judge.

Filed April 11, 1919. G. H. Marsh, Clerk. [340½]

Certificate of Clerk U. S. District Court to Transcript of Record.

United States of America,
District of Oregon,—ss.

I, G. H. Marsh, Clerk of the District Court of the United States for the District of Oregon, do hereby certify that the foregoing pages numbered from 2 to 340, inclusive, constitute the transcript of record upon appeal from the District Court of the United States for the District of Oregon, in the case in which Herbert L. Hildreth is plaintiff and appellee, against Jim M. Mastoras defendant and appellant. That the said transcript has been prepared in accordance with the praecipe of the appellant filed in said cause and is a true and complete transcript of the record and proceedings had in said court in said cause as the same appear of record and on file at my office and in my custody.

I further certify that the cost of the foregoing transcript is Ninety 70/100 Dollars and that the same has been paid by the said appellant.

In Testimony Whereof I have hereunto set my hand and affixed the seal of said court at Portland, in said District, this 22d day of April, 1919.

[Seal] G. H. MARSH,
Clerk. [341]

[Endorsed]: No. 3341. United States Circuit Court of Appeals for the Ninth Circuit. Jim M. Mastoras, Appellant, vs. Herbert L. Hildreth, Appellee. Transcript of Record. Upon Appeal from the United States District Court for the District of Oregon.

Filed May 1, 1919.

F. D. MONCKTON,
Clerk of the United States Circuit Court of Appeals for the Ninth Circuit.

By Paul P. O'Brien,
Deputy Clerk.

In the District Court of the United States for the District of Oregon.

IN EQUITY—No. 7466.

HERBERT L. HILDRETH,

Plaintiff,

vs.

JIM M. MASTORAS,

Defendant.

Order Extending Time to and Including May 2, 1919, to File Record and Docket Cause.

In the above-entitled cause now comes the defendant and appellant, Jim M. Mastoras, and prays that an extension of time within which to prepare, serve and file herein transcript of record and docket on appeal be allowed to and including May 2, 1919.

The grounds upon which the petition is based, are that although the Patent Office has finally furnished the copies of patents as set out in the last preceding prayer for extension, the delay in furnishing them was so great that they were not all received in Portland until within a few days last preceding the date hereof, and that consequently though the record is now completed, as will appear from the file of the case in this Court, it was of necessity completed so late as to require additional time as prayed for in order to enable the Clerk of this Court to complete and forward the transcript to the Circuit Court of Appeals.

Dated at Portland, Oregon, this 1st day of April, 1919.

JOSEPH L. ATKINS,
W. A. ROBBINS,
Attorneys for Defendant.

Due service of the foregoing is hereby accepted this 1st day of April, 1919.

C. G. MURPHY,
By L.,
Of Counsel for Plaintiff.

Upon the showing above made,—

IT IS HEREBY ORDERED, that the time of defendant and appellant for filing transcript of record and docket on appeal in the above-entitled cause is hereby extended to and including May 2, 1919.

CHAS. E. WOLVERTON,
Judge.

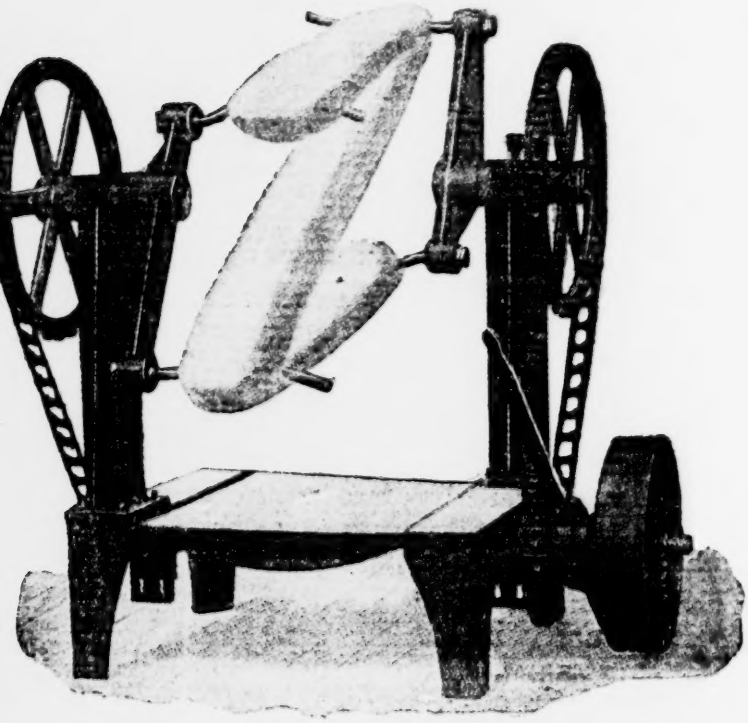
[Endorsed]: No. 7466. 19–293. In the District Court of the United States, for the District of Oregon. Herbert L. Hildreth, Plaintiff, vs. Jim M. Mastoras, Defendant. Petition for Extension and Order on Appeal.

No. 3341. United States Circuit Court of Appeals for the Ninth Circuit. Order Under Rule 16 Enlarging Time to May 2, 1919, to File Record Thereof and to Docket Case. Filed Apr. 4, 1919. F. D. Monckton, Clerk. Re-filed May 1, 1919. F. D. Monckton, Clerk.

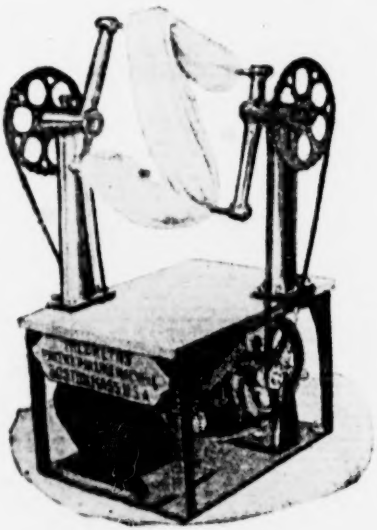
Plaintiff's Exhibit 10.

LEASE AND AGREEMENT HILDRETH CANDY PULLING MACHINES

DEFTS. EX. "B."



Style No. 3. Factory Size



Style No. 1. Store Window Size

Date, ... 19—.

Lease No. ....

Lease and Agreement

between

H. L. HILDRETH

Boston, Mass., U. S. A.

and

Mr. ....

No..... Style No.....

Lease begins.....19—.

Lease expires.....19—.

Lease of Candy Pulling Machine

Machine No. 345. Style No. One—A.

WHEREAS Herbert L. Hildreth, of Boston, Massachusetts, hereinafter called the Lessor is the owner of the following named Letters Patent of the United States:

No. 731,681, dated June 23, 1903,
No. 736,313, dated Aug. 11, 1903,
No. 772,442, dated Oct. 18, 1904,
No. 779,141, dated Jan. 3, 1905,
No. 781,853, dated Feb. 7, 1905,
No. 804,726, dated Nov. 14, 1905,
No. 831,501, dated Sept. 18, 1906,
No. 832,384, dated Oct. 2, 1906,
No. 857,770, June 25, 1907,
No. 859,788, July 9, 1907,
No. 881,442, Mar. 10, 1908,

and of certain other inventions in or relating to candy pulling machines or processes for which applications have been made or are to be made, and

WHEREAS said Lessor is the owner of a Candy Pulling Machine No. 345, Style No. One—A, embodying some or all of said inventions set forth in some or all of said patents, and

WHEREAS Jim M. Mastoras, 601½ Third Ave., Seattle, Washington., hereinafter called the Lessee is desirous of renting said machine,

NOW THEREFORE, the parties hereto agree as follows:

The said Lessor hereby leases the said Machine Form One, Style A, unto the said Jim M. Mastoras, 601½ Third Ave., Seattle, Washington, hereinafter called the Lessee, to be by the Lessee used and employed only under the terms and conditions expressed in an agreement between the Lessor and Lessee of even date herewith, which is hereby referred to and made part hereof,

at an annual rental of $200 dollars per year payable each year in advance. This lease shall continue for three months from the date hereof, and so on from year to year, until this lease shall be determined at the end of the first or any subsequent year, by the Lessee giving to the Lessor thirty days' previous notice in writing. The Lessor hereby acknowledges the receipt from the Lessee of the rent for the first year.

If the Lessee shall die, become bankrupt, or dispose of his business during the term of this lease, the same may with the approval of the Lessor in writing, pass to the legal representative or assign of the Lessee for the unexpired term thereof, otherwise this lease shall be strictly personal and non-transferable.

The Date of this Lease is November 24, 1913.

Witness the Hands and Seals of the Parties hereto:

H. L. HILDRETH. [Seal]

Please sign here ☞ JIM M. MASTORAS. [Seal]

Any Agreement not Expressed Herein Will Be Invalid.

Agreement Forming Part of Lease of Candy Pulling Machine.

Machine No. 345. Style No. One—A.

WHEREAS Herbert L. Hildreth, of Boston, Massachusetts, hereinafter called the Lessor is the owner of the following named Letters Patent of the United States, to wit:

LETTERS PATENT:

No. 731,681, dated June 23, 1903,
No. 736,313, dated Aug. 11, 1903,
No. 772,442, dated Oct. 18, 1904,
No. 779,141, dated Jan. 3, 1905,
No. 781,853, dated Feb. 7, 1905,
No. 804,726, dated Nov. 14, 1905,
No. 831,501, dated Sept. 18, 1906,
No. 832,384, dated Oct. 2, 1906,
No. 857,770, June 25, 1907,
No. 859,788, July 9, 1907,
No. 881,442, Mar. 10, 1908,

and is the owner of certain other inventions for which applications have been made, or are to be made, and

WHEREAS said Lessor is the owner of a Candy Pulling Machine No. 345, Style No. One—A, embodying some or all of said inventions set forth in some or all of said patents or applications, and

WHEREAS Jim M. Mastoras, 601½ Third Ave., Seattle, Washington, hereinafter called the Lessee, is desirous of renting said machine, now, therefore, the parties hereto agree as follows:

1. Upon receipt of the sum of One Hundred Dollars, said Hildreth, hereby agrees to deliver f. o. b. Boston, one Candy Pulling Machine No..... Style No. One—A, the same to be complete and in good working order at the time of said delivery, and also agrees to deliver to said Lessee, a lease thereof for the term of three months.

2. The lessee agrees to execute the said lease, to receive and accept the said machine and to keep the same in good order and repair. In the event of the breakage of any part of said machine, due to flaw or other inherent defect, a duplicate of such part will be furnished by said Hildreth upon application, the same to be and remain the property of the said Hildreth.

3. At the expiration of said lease the Lessee agrees to deliver the said machine to the said Hildreth, f. o. b. Boston. In case the machine is totally destroyed by fire or otherwise, the lessee agrees to pay the Lessor $250.00. In case the machine is partially destroyed, then the Lessee is to return the machine to the Lessor, who will repair the same and charge the Lessee the actual cost of repair. If the Lessee shall not have given notice in writing to the Lessor thirty days before the end of the first or any subsequent year, then the said lease shall be deemed to continue in force for the ensuing year, and the Lessee agrees to pay the rent for said ensuing year on or before the first day of said ensuing year. But in case of failure to pay the rent as provided in said lease, the Lessor may, without being deemed guilty of any trespass or tort, and without waiving his rights to sue for the rent, enter any building or place, where the said machine may be, and take possession of and remove said machine therefrom.

4. The Lessee hereby expressly acknowledges the validity of the letters patent hereinbefore referred to, and the exclusive ownership thereof, by the said Hildreth. It is further expressly agreed that during the term of this lease, or any renewal thereof, the Lessee will not engage, directly or indirectly, in the manufacture or sale of any candy put up, wrapped, advertised, or otherwise offered for sale, in imitation of the "Velvet" Molasses Candy, of which said Hildreth is the sole manufacturer and proprietor.

SPECIAL.—It is hereby understood and agreed between the Lessor and the Lessee that this lease may be continued in force for nine months after date of its expiration, by giving the Lessor 10 days' notice in writing of such intentions, and the payment of $100.00.

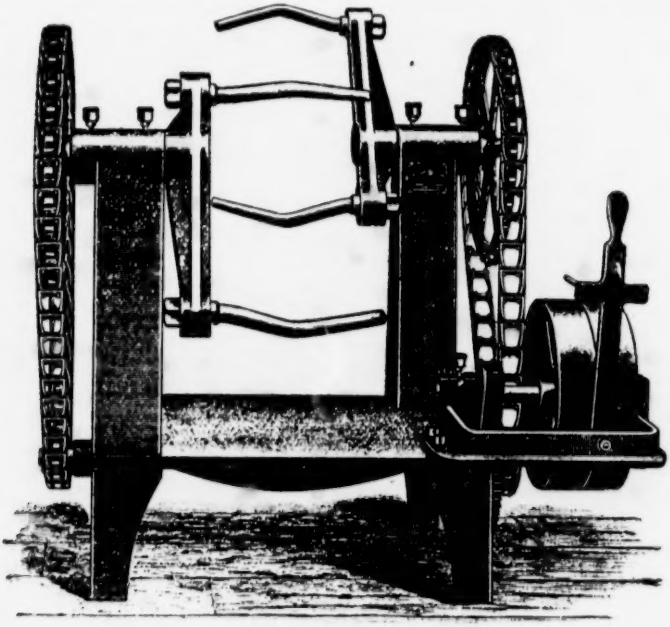
The Date of this Agreement is November 24, 1913.

Witness the Hands and Seals of the Parties hereto:

H. L. HILDRETH. [Seal]

Please sign here ☞ JIM M. MASTORAS. [Seal]

Any Agreement not Expressed Herein Will Be Invalid.



Style No. 4. Factory Size

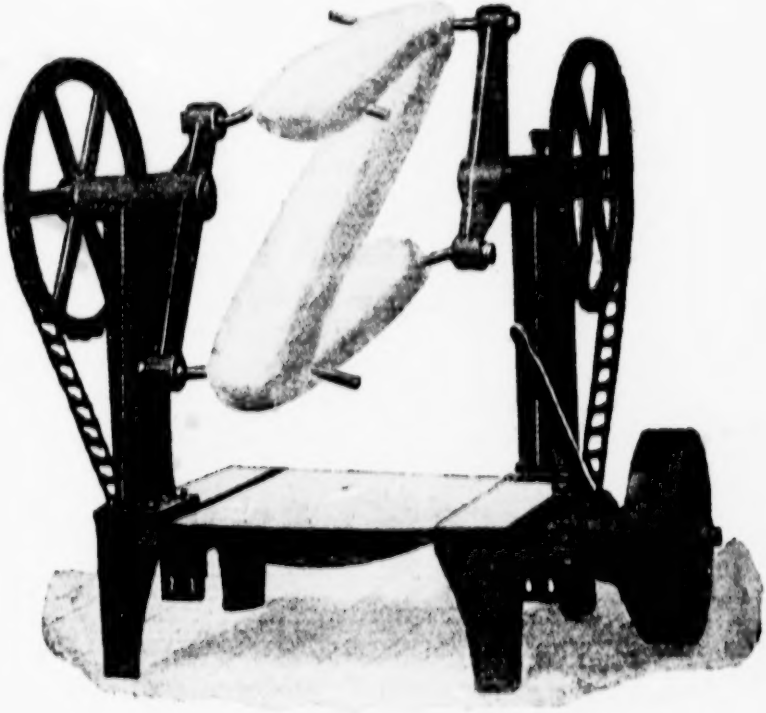
[Endorsed]: U. S. Dist. Court. Filed Jan. 26, 1918. G. H. Marsh, Clerk, District of Oregon.

No. 3341. United States Circuit Court of Appeals for the Ninth Circuit. Filed May 1, 1919. F. D. Monckton, Clerk.

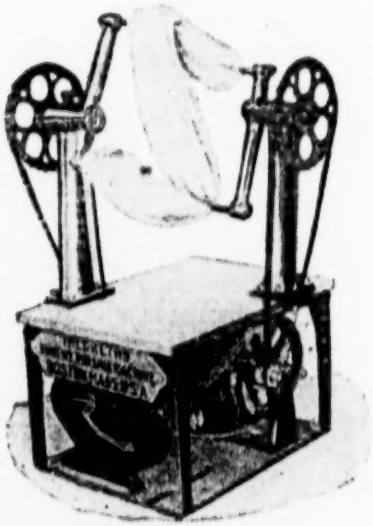
Plaintiff's Exhibit No. 11.

LEASE AND AGREEMENT

HILDRETH CANDY PULLING MACHINES



Style No. 3, Factory Size



Style No. 1, Store Window Size

Date, July 15, 1914.

Lease No.....

Lease and Agreement
between
H. L. Hildreth
Boston, Mass., U. S. A.
and

Mr. ....

No..... Style No.....

Lease begins.....19—.

Lease expires.....19—.

Lease of Candy Pulling Machine.
Machine No. 345. Style No. One—A.

WHEREAS Herbert L. Hildreth, of Boston, Massachusetts, hereinafter called the Lessor, is the owner of the following named Letters Patent of the United States:

No. 731,681, dated June 23, 1903,
No. 736,313, dated Aug. 11, 1903,
No. 772,442, dated Oct. 18, 1904,
No. 779,141, dated Jan. 3, 1905,
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No. 804,726, dated Nov. 14, 1905,
No. 831,501, dated Sept. 18, 1906,
No. 832,384, dated Oct. 2, 1906,
No. 857,770, June 25, 1907,
No. 859,788, July 9, 1907,
No. 881,442, Mar. 10, 1908,

and of certain other inventions in or relating to candy pulling machines or processes for which applications have been made or are to be made, and

WHEREAS said Lessor is the owner of a Candy Pulling Machine No. 345, Style No. 1—A, embodying some or all of said inventions set forth in some or all of said patents, and

WHEREAS Jim Mastoras, Aberdeen, Wash., hereinafter called the Lessee is desirous of renting said machine,

NOW, THEREFORE, the parties hereto agree as follows:

The said Lessor hereby leases the said Machine No. 345, Form 1, Style A, unto the said Jim Mastoras, Aberdeen, Wn., hereinafter called the Lessee, to be by the Lessee used and employed only under the terms and conditions expressed in an agreement between the Lessor and Lessee of even date herewith, which is hereby

referred to and made part hereof, at an annual rental of Two Hundred Dollars per year payable each year in advance. This lease shall continue for one year from the date hereof, and so on from year to year, until this lease shall be determined at the end of the first or any subsequent year, by the Lessee giving to the Lessor thirty days' previous notice in writing. The Lessor hereby acknowledges the receipt from the Lessee on the rent for the first year of $100—the balance due $50. Dec. 1st, 1914, and $50—Jany. 1st, 1915.

If the Lessee shall die, become bankrupt, or dispose of his business during the term of this lease, the same may with the approval of the Lessor in writing, pass to the legal representative or assign of the Lessee for the unexpired term thereof, otherwise this lease shall be strictly personal and non-transferable.

The Date of this Lease is July 15, 1914.

Witness the Hands and Seals of the Parties hereto:

Please sign here ☞ JIM M. MASTORAS. [Seal]

H. L. HILDRETH. [Seal]

Any Agreement not Expressed Herein Will Be Invalid.

Agreement Forming Part of Lease of Candy Pulling Machine.

Machine No. 345. Style No. One—A.

WHEREAS Herbert L. Hildreth, of Boston, Massachusetts, hereinafter called the Lessor, is the owner of the following named Letters Patent of the United States, to wit:

LETTERS PATENT:

No. 731,681, dated June 23, 1903,
No. 736,313, dated Aug. 11, 1903,
No. 772,442, dated Oct. 18, 1904,
No. 779,141, dated Jan. 3, 1905,
No. 781,853, dated Feb. 7, 1905,
No. 804,726, dated Nov. 14, 1905,
No. 831,501, dated Sept. 18, 1906,
No. 832,384, dated Oct. 2, 1906,
No. 857,770, June 25, 1907,
No. 859,788, July 9, 1907,
No. 881,442, Mar. 10, 1908,

and is the owner of certain other inventions for which applications have been made or are to be made, and

WHEREAS said Lessor is the owner of a Candy Pulling Machine No. 345, Style No. 1—A, embodying some or all of said inventions set forth in some or all of said patents or applications, and

WHEREAS Jim Mastoras, Aberdeen, Wn., hereinafter called the Lessee is desirous of renting said machine, now, therefore, the parties hereto agree as follows:

1. Upon receipt of the sum of One Hundred Dollars and $100 more to be paid by Jany. 1, 1915, said Hildreth hereby agrees to deliver at Seattle, one Candy Pulling Machine No. 345 Style No. 1—A. the same to be accepted as complete and in good working order at the time of

said delivery, and also agrees to deliver, to said Lessee, a lease thereof for the term of one year.

2. The lessee agrees to execute the said lease, to receive and accept the said machine and to keep the same in good order and repair. In the event of the breakage of any part of said machine, due to flaw or other inherent defect, a duplicate of such part will be furnished by said Hildreth upon application, the same to be and remain the property of the said Hildreth.

3. At the expiration of said lease the Lessee agrees to deliver the said machine to the said Hildreth, f. o. b. Boston. In case the machine is totally destroyed by fire or otherwise, the lessee agrees to pay the Lessor $250.00. In case the machine is partially destroyed, then the Lessee is to return the machine to the Lessor, who will repair the same and charge the Lessee the actual cost of repair. If the Lessee shall not have given notice in writing to the Lessor thirty days before the end of the first or any subsequent year, then the said lease shall be deemed to continue in force for the ensuing year, and the Lessee agrees to pay the rent for said ensuing year on or before the first day of said ensuing year. But in case of failure to pay the rent as provided in said lease, the Lessor may, without being deemed guilty of any trespass or tort, and without waiving his rights to sue for the rent, enter any building or place, where the said machine may be, and take possession of and remove said machine therefrom.

4. The Lessee hereby expressly acknowledges the validity of the letters patent hereinbefore referred to, and the exclusive ownership thereof, by the said Hildreth. It is further expressly agreed that during the term of this lease, or any renewal thereof, the Lessee will not engage, directly or indirectly, in the manufacture or sale of any candy put up, wrapped, advertised, or otherwise offered for sale, in imitation of the "Velvet" Mo-

lasses Candy, of which said Hildreth is the sole manufacturer and proprietor.

SPECIAL.—In consideration of the delivery of said machine to lessee without payment of $200—I, Theresa McDonald, hereby warrant and guaranty that said lessee will perform the foregoing conditions—~~dated this 19th day of October 1914~~ of lease and agreement. Dated July 15th, 1914.

THERESA McDONALD.

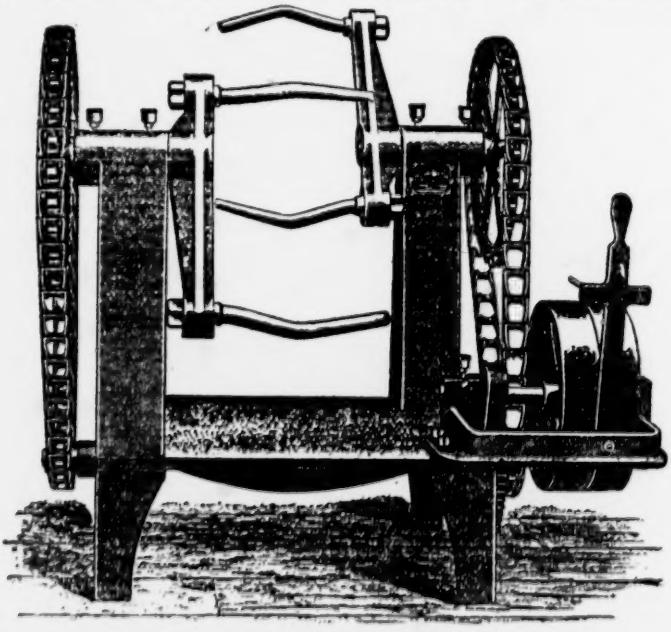
The Date of this Agreement is July 15, 1914.

Witness the Hands and Seals of the Parties hereto:

Please sign here JIM M. MASTORAS. [Seal]

H. L. HILDRETH. [Seal]

Any Agreement not Expressed Herein Will Be Invalid.



Style No. 4 Factory Size

[Endorsed]: Plaintiff's Exhibit 11. Filed Jan. 26, 1918. G. H. Marsh, Clerk.

No. 3341. United States Circuit Court of Appeals for the Ninth Circuit. Filed May 1, 1919. F. D. Monckton, Clerk.

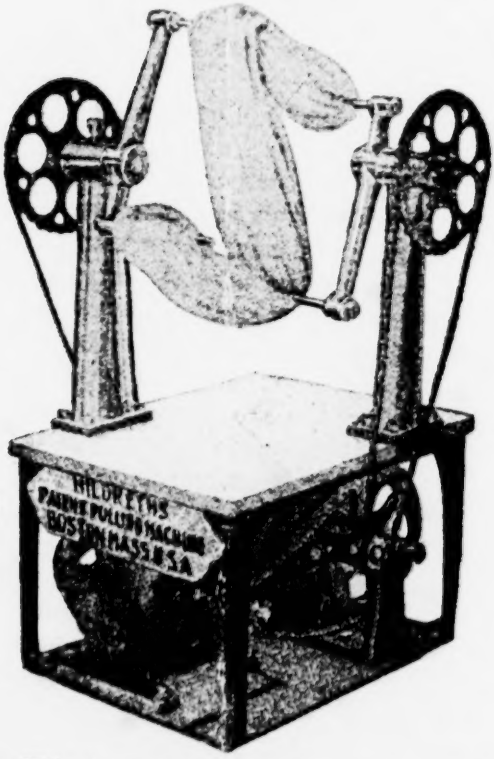
Plaintiff's Exhibit No. 18.

HILDRETH'S PATENTED CANDY PULLING MACHINE.

The most sanitary and economical method of Pulling Candy

Display Puller, Largest Size

Form 1 Style A



For Store Windows, Summer Resorts, Parks, Etc.

Capacity and terms of lease see back page

Manufactured and leased by

H. L. Hildreth, 67 Batterymarch St., Boston, Mass., U. S. A.

Pulling Machine Information

Before the year 1900 all pulled candy was done by hand labor entirely, although the method was universally recognized as being unsanitary as well as unsatisfactory from the standpoint of commercial efficiency.

By the invention and development of Hildreth's Patented Candy Pulling Machine a revolution has taken place in this branch of the confectionery business, with the result that at present over seventy-five per cent. of the candy that is pulled in the United States is pulled on Hildreth's Machines.

The range of work that can be done on these Machines is extraordinary; handling with the greatest success hard-boiled candy, to be made into sticks, broken candy, chips, buttercups, caramels, caramel mixtures, and all soft-boiled goods. It is also used with great success in pulling chewing gum, shoemakers' wax, and a particular grade of white varnish that requires pulling.

The work done on Hildreth's Patented Candy Pulling Machines is superior to that done by hand. Leaving out of consideration the point that machine-pulled candy must of necessity be more sanitary than that produced by sweaty and possibly diseased hands, when it is understood that the machines pull hard-boiled goods in from two to three minutes, and chewing candies, high or low cooked, in about eight minutes, the batches each ranging in weight from 10 to 300 lbs., according to the size of machine; it will be readily seen that each machine easily does the work of 4 to 6 men. The batch pulled by machine can readily be increased twenty per cent. in bulk over ordinary hand pulling. This point especially is of great advantage on penny-count goods.

Furthermore, you can use a lower grade of sugar and make as good goods with the machine as you can with hand labor using a higher grade, and it all adds to your profits.

A greater degree of uniformity in product is easily attainable by the use of these machines than would be possible at all by hand pulling. They pull every batch alike, making the candy whiter and lighter. On these machines it is perfectly practical to work up your scrap candy, thus utilizing what would otherwise be waste.

The machines are ready to work at all times, day or night. They never get sick, tired, lazy or go on a strike. They give you absolute control of your pulling room.

The more candy you are now pulling by hand the more money you will save when you join the army of users of Hildreth's Candy Pulling Machines.

Machines are not sold, but are leased by the year.

Form 1 Style A

This machine is made especially to be used in retail store windows, summer resorts, parks, booths, etc. It pulls from 10 to 25 lbs. at each batch and is all connected up with a ½ horse power electric motor. All you have to do, after the motor is connected up to your electricity, is to put the batch of candy on the machine and the machine does the pulling.

It does not require any attention after you put the batch on. It takes care of itself until the candy is finished. It is a great attraction in your window where the people can see it work when they pass by your store.

It is made nice enough to put in any store window, or anywhere the public can see it working; we have them at work all over the country and they are a perfect success. You cannot afford to be without one.

It is made of the best material. It has an aluminum base and nickel trimmings. Floor space 1½x2 feet, so

that it is not too large to put on your counter or in your window. It runs practically noiseless.

It will pull any kind of candy that can be pulled by hand, and is a great saving in money and labor. It makes the candy better than hand pulled and certainly more sanitary.

It surely will increase your trade as it has others', as we have them at work all over the country, and most of them keep them year after year, as they are such a benefit to their business.

If you have not got one, don't wait. Order it now and start your business booming. Don't wait until you get gray-headed; order it now.
Listed below are several sizes to meet all requirements.

Form 0 Style A

(A Display Puller). For Store Windows, Summer Resorts, Parks, Etc. Capacity 5 to 10 lbs. per batch. Equipped with electric motor. Rental $100.00 per year, in advance.

Form 1 Style A

(A Display Puller). For Store Windows, Summer Resorts, Parks, Etc. Capacity 10 to 25 lbs. per batch. Equipped with electric motor. Rental $200.00 per year, $150.00 for six months, $100.00 for three months, in advance.

Form 3 Style D

(Small Factory Size). Capacity 50 to 100 lbs. per batch. Rental (belt drive) $250.00 per year; (electric motor drive) $300.00 first year, $250.00 for each year thereafter, in advance.

Form 4 Style A

(Medium Factory Size). Capacity 75 to 200 lbs. per batch. Rental (belt drive only), $300.00 per year, in advance.

Form 5 Style A

(Large Factory Size). Capacity 75 to 300 lbs. per batch. Rental (belt drive only), $350.00 per year, in advance.

Form 6 Style R Twin Puller

(Latest Model). Pulls two batches at the same time. It has special advantages. Write for circular. Capacity 15 to 100 lbs. on each side. Rental (electric motor drive only), $350.00 per year, in advance.

Write for special circular on any size listed. Our terms are in advance; we pay no freight or express charges.

[Endorsed] U. S. Dist. Court. Filed Jan. 26, 1918. G. H. Marsh, Clerk, District of Oregon.

No. 3341. United States Circuit Court of Appeals for the Ninth Circuit. Filed May 1, 1919. F. D. Monckton, Clerk.

No. 3341

United States
Circuit Court of Appeals
For the Ninth Circuit.

JIM M. MASTORAS,

Appellant,

vs.

HERBERT L. HILDRETH,

Appellee.

Upon Appeal from the United States District Court for the District of Oregon.

PROCEEDINGS HAD IN THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE NINTH CIRCUIT.

At a stated term, to wit, the September term, A. D. 1918, of the United States Circuit Court of Appeals for the Ninth Circuit, held at the courtroom, in the city of Portland, in the State of Oregon, on Thursday, the 18th day of September, in the year of our Lord one thousand nine hundred and nineteen—Present: The Honorable WILLIAM B. GILBERT, Senior Circuit Judge, Presiding; the Honorable WILLIAM W. MORROW, Circuit Judge; the Honorable WILLIAM H. HUNT, Circuit Judge.

No. 3341.

JIM M. MASTORAS,

Appellant,

vs.

HERBERT L. HILDRETH,

Appellee.

Order of Submission, etc.

ORDERED motion filed, July 21, 1919, for leave to have cause heard on typewritten transcript of record, and for relaxation of the provisions of Rule 23 of the Rules and Practice of this Court, presented by Mr. Joseph L. Atkins, counsel for the appellant, Mr. George P. Dike, counsel for the appellee, having been heard, and submitted to the Court for consideration and decision.

Upon due consideration thereof, ORDERED said motion granted.

FURTHER ORDERED appeal in the above-entitled cause argued by Mr. Atkins, counsel for the appellant, and by Mr. Dike, counsel for the appellee, and submitted to the Court for consideration and decision.

At a stated term, to wit, the October Term, A. D. 1919, of the United States Circuit Court of Appeals for the Ninth Circuit held in the courtroom thereof, in the City and County of San Francisco, in the State of California, on Tuesday, the 24th day of February, in the year of our Lord one thousand nine hundred and nineteen. Present: The Honorable WILLIAM B. GILBERT, Senior Circuit Judge, Presiding; The Honorable WILLIAM W. MORrow Circuit Judge; The Honorable CHARLES E. WOLVERTON, District Judge.

IN THE MATTER OF THE FILING OF CERTAIN OPINIONS AND OF THE FILING AND RECORDING OF CERTAIN JUDGMENTS AND DECREES.

By direction of the Honorable William B. Gilbert, William W. Morrow and William H. Hunt, Circuit Judges, before whom the causes were heard, ORDERED that the typewritten opinion this day rendered by this Court in each of the following entitled causes be forthwith filed by the clerk, and that a Judgment or Decree be filed and recorded in the minutes of this court in each of the causes in accordance with the opinion filed therein: Jim M. Mastoras, Appellant, vs. Herbert L. Hildreth, Appellee. No. 3341. * * *

In the United States Circuit Court of Appeals for the Ninth Circuit.

3341.

JIM M. MASTORAS,

Appellant,

vs.

HERBERT L. HILDRETH,

Appellee.

Opinion U. S. Circuit Court of Appeals.

JOSEPH L. ATKINS, W. A. ROBBINS and DAVID E. LOFGREN, for the Appellant.

MacLEOD, CALVER, COPELAND & DIKE, CHESTER G MURPHY and GEORGE P. DIKE, for the Appellee.

Before GILBERT, MORROW and HUNT, Circuit Judges.

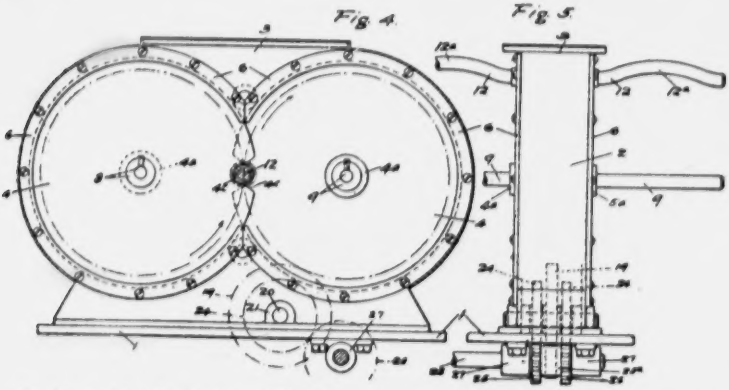
GILBERT, Circuit Judge:

The appellant appeals from a decree of the court below whereby he was adjudged to have infringed Claim 1 of Patent No. 831,501, issued on September 18, 1906, to Herbert M. Dickinson, for an "Improvement in Candy-pulling Machines." The appellant denied infringement and denied the validity of the Dickinson patent.

The only prior patent to which we find it necessary to refer is No. 511,011, issued to Fairchau on December 19, 1893, for an improvement in "Machines for working or pulling candy." Firchau's machine consists of a fixed drum wherein are placed heads which carry lateral fingers arranged so as to travel in different orbits in opposite directions. In operation the candy is hung upon the upper finger, and upon the rotation of the heads in opposite directions, it is engaged by the lower finger and stretched in an opposite direction and worked. Say the specifications, "This takes place at each rotation of the heads, the candy being alternately massed and stretched." In the Dickinson machine the candy is placed in a trough some eight feet in length in the bottom of which at the center is placed an unright fixed pin. Attached to an arm pivoted on a transverse traveling bar are two pins which project downwardly and nearly to the bottom of the trough. The bar with the arm on which are fastened the projecting pins is carrier back and forth on top of the trough from one end thereof to

the other. As the bar approaches each end a hook engages the arm from which the pins are suspended and turns it about upon the bar, whereby the pins make in the trough approximately a semi-revolution, before returning to the opposite end. The specifications say: "The candy is acted upon in a manner and by means of the shifting hook along a path corresponding to what I term a Figure 8." Claim 1 is as follows: "1. A candy-pulling machine comprising a plurality of oppositely-disposed candy hooks or supports, a candy-puller and means for producing a specified relative in-and-out motion of those parts for the purpose set forth." The machine which was held to infringe is one made under the patent to G. L. Langer No. 1,232,697, issued July 10, 1917, for "a candy-pulling machine." Langer's specifications say: "My invention relates to candy-pulling machines, and more particularly to a machine adapted to automatically pull candy by means of a floating puller which is carried through a course of travel corresponding in form to the figure 8, and around fixed supporting pins arranged concentrically within the two circular portions of said figure 8, whereby the candy is pulled by said floating puller and alternately carried thereby around said fixed supporting pins." The machine consists of a base supporting two circular or drum-like castings joined together at one side and standing on edge. In the center of each of these drums and on either side thereof is a fixed pin, while a movable pin projecting on each side passes first around one drum and then around the other in continuous operation. Candy is simultaneously pulled on each side of the machine. It is stretched across the fixed pins on either side and above the moving pin. By the movement of the machine the moving pin pulls the candy and wraps it first around one fixed pin, then stretches it and wraps it around the other, and continues that operation alternately from pin to pin, thus pulling and stretching the candy as the floating

pin is carried through its course of travel. The essence of the Langer invention is that it is adapted to carry a floating pulling member first around one circular course in one direction, and then around another circular course in the opposite direction. The machine is shown below.



It is said that the Firchau patent has no place in the prior art for the reason that it will not pull candy but will only mix it. To this we cannot assent. The moving fingers of that device undoubtedly will to some extent pull candy. The candy being placed upon the upper finger which has projecting knobs to hold it, will as that finger moves be caught by the lower finger and pulled in the opposite direction. If it be said that the pulling operation is not continuous but intermittent, the same may be said of the Dickinson device for it is obvious that during the travel of the movable pins from the end of the trough toward and to the central pin there is no pulling of the candy or anything more than a pushing of the mass thereof in front of the moving pins. It is only as Dickinson's moving pins travel away from the center and toward the ends of the trough that any tension is placed on the candy. It is thus seen that Dickinson did not get very far beyond Firchau and that in his device

as in Firchau's, the candy is "alternately massed and stretched." Although claim 1 of the Dickinson patent does not call for means to support the candy against gravity, it is obvious that the device will not operate without a trough for support, such as the specifications describe, and that if the pins were placed in a horizontal position they could not be so operated as to sustain the candy against gravity, for the reason of the intermittent relaxation of the candy from all tension. In Hildreth vs. Auerbach, 223 Fed. 545, Judge Learned Hand said: "I must confess that the conception of the pins as 'supports' seems to me quite foreign to Dickinson's disclosure." Dickinson was not the first to invent a machine to pull candy. But if he were the first, as the appellee contends, he acquired no more than the exclusive right to pull candy in the way which he specified and he is not justified in claiming the exclusive right to pull it in some different way.

The testimony leaves it doubtful whether the Dickinson machine is operative. The only testimony as to its practical operativeness is that of the appellee. He testified that three machines were made, that two of them had been broken up, and that the third was still in his possession, that he did not use it in practical operation, that on one occasion a number of years after he bought it, he had used it and pulled candy with it, and that by shortening the pull and speeding the machine it would "pull candy all right." "Q. Will it pull it practically? A. Well, practically would be so it would be commercially. Q. Well, would it pull it commercially then? A. Well, not the way we pull our candy. It was not pulled enough. It would pull it, but the stroke was too long. We shortened up the stroke, and made it all right. * * * Q. And that would not pull candy until you changed it? A. Oh, yes, it would. Q. It would not pull it commercially? A. Well, no, it would not pull it, not as well as we wanted candy pulled." A

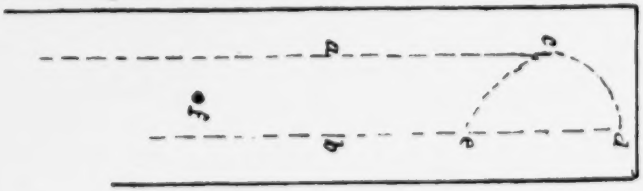
witness for the appellant, an experienced candy-worker, testified that the Dickinson device would stir candy but would not pull it, and stated as a reason therefor that it does not let in enough air, "Doesn't get the air to it. It lays flat on the floor there on the bottom of the trough, and it certainly doesn't get air around. In any of the pulling machines, as it is in existence now, the air is from all sides. It absorbs the air in knocking it around, but this one don't. The appellee himself has recorded his adverse criticism of the principle on which the Dickinson machine operates. In his specification in letters patent No. 832,384, for a candy-pulling machine, issued to him October 2, 1906, he states: "Attempts have heretofore been made to work candy in a manner analogous to that in which dough and other substances are treated—that is to say, to place the mass within a receiving or supporting chamber into which moving arms project. An example of this construction is shown in United States letters patent No. 511,011, granted December 19, 1893, to P. J. G. Firchau. In such machines the mass of candy is supported in whole or in part by a chamber, and the function of the moving arms or projections is to alternately mass and stretch the material, as stated in said patent. This method of treatment and the machines which embody it are not successful or practical to produce the results heretofore obtained by hand-pulling, which results must be obtained in any successful candy-pulling machine." The fact that under a patent no machine has ever been made and shown to work successfully does not prevent the owner of the patent from restraining infringement. Bement vs. National Harrow Co., 186 U. S. 70, 90. But it is also true that if the patented device is not operative, it cannot be infringed by one that is. Royer vs. Coupe, 29 Fed. 358; General Elec. Co. vs. Wise, 119 Fed. 922; Hale & Kilburn Mfg. Co. vs. Oneonta G. R. & S. Ry. Co., 129 Fed. 598; Bowers vs. San Francisco Bridge Co., 91 Fed. 381,

416; Chadeloid Chemical Co. vs. Frank S. De Ronde Co., 146 Fed. 988. It is true, as Judge Hough said in Engineering Co. vs. Hotel Astor, 226 Fed. 779, 783: "A device need not be perfect in order to escape the charge of inoperativeness," but that was a case in which the Court found the evidence to show "substantial performance." The case at bar is not one of those in which the first embodiment of a generic invention works imperfectly, but in which the defects may be remedied by readjustment or relative changes in size or shape or construction of members. It is not a case in which the invention as described is crude or defective, but is susceptible of improvement. If there is inoperativeness here, it is inherent in the very conception and structure of the device. If it is not susceptible of use commercially, it has no utility, for it is obvious that such a machine can have no utility except in the commercial field.

But aside from the question of the operativeness and utility of the Dickinson machine, we are of the opinion that the decree should be reversed for failure of the appellee to sustain the charge of infringement. It is unnecessary to follow the appellee into the field of his prior litigation in suits in court, or in interference proceedings in which the Dickinson applicaton and several other applications for patents, including an application of the appellee, were involved, resulting in the award of priority to the Dickinson invention. In the determination of the question of infringement involved in the present case, the appellee must stand upon the Dickinson patent. It is a legal presumption that a later patent does not infringe an earlier patent. Putnam vs. Keystone Bottle Co., 38 Fed. 234, Ney vs. Ney Mfg. Co., 69 Fed. 405; St. Louis Car Coupler Co. vs. National Malleable Castings Co., 87 Fed. 885; Griffith vs. Shaw, 89 Fed. 313; Norton vs. Jensen, 90 Fed. 415; Century Elec. Co. vs. Westinghouse Co., 191 Fed. 350; Benthall Mach. Co. vs. National Corporation, 222 Fed. 918, 932. Prior to

the use of machines candy was pulled by hand with the aid of a single hook. To pull it successfully by machinery two or more hooks are necessary. Dickinson used three and Langer uses three. But the principle and mode of operation of the two machines are different. One of the elements of claim 1 of the Dickinson patent is "means for producing a specified in-and-out motion of these parts for the purpose set forth." Of course a specified movement of a machine irrespective of the mechanism which causes it is not patentable. The patent laws give protection to the inventor of a "new and useful art, machine, manufacture, or composition of matter." Here the subject of the patent is a machine, and it creates a monopoly in the use and sale of the machine only. It does not and cannot cover a mode of operation. Burr vs. Duryee, 1 Wall. 531; American Crayon Co. vs. Sexton, 139 Fed. 564; Knapp vs. Morss, 150 U. S. 221, 227. In Westinghouse vs. Boyden Power Brake Co., 170 U. S. 537, 556, Mr. Justice Brown said: "Because the law requires a patentee to explain the mode of operation of his peculiar machine, which distinguishes it from others, it does not authorize a patent for 'a mode of operation as exhibited in the machine.'" Comparing the Dickinson machine with that of Langer, with reference to Claim 1 of the former, we find that Langer's machine has a "plurality of oppositely-disposed candy hooks" which are also supports, and that the Dickinson machine has a plurality of "oppositely-disposed candy hooks" which are hooks only and not supports. Both machines have means for producing a relative in and out motion of hooks. Dickinson's claim for a "specified" relative in-and-out motion must be held to mean the in-and-out motion which is specified in the claims and specifications and exhibited by the machine itself. Dickinson acquired no monopoly of all in-and-out motions in candy-pulling machines. It is said that the specification of the Langer patent shows that it adopts

the figure 8 movement of the Dickinson patent. It is true that in both patents there is the common use of the term "figure 8," as descriptive of the operation of the respective devices. In the Langer patent the term is applicable, for the moving puller and the candy which it carries describe a true figure 8. In the Dickinson specification two moving pins in conjunction with a stationary pin "move the candy" along a path corresponding to "what I term a figure 8." It is impossible, however, to find in the operation of the Dickinson machine a movement of candy in the course of a figure 8. As the candy reaches the end of the trough, it stands in the shape of a letter V. When the movable pins are reversed, the sides of the V are brought together, and the ends are twisted about and then the candy is massed and pushed on the reverse movement back to the stationary pin which again divides it into the form of a letter V. Dickinson's in-and-out movement is shown by the accompanying plat. The movable pins travel in the trough past the fixed pin f, proceeding respectively on the lines a and b, to the end of the trough, the right-hand pin in advance of the left. When they reach the end of the trough, they are respectively at d and e. As they turn to the left on their common axis and start on their return travel, one pin describes the arc dc, and the other the arc ce, and they continue in their course past the fixed pin f to the opposite end of the trough where the same turning movement is repeated.



In the Dickinson machine the pulling pins, yoked together, move with a reciprocating motion back and forth in a trough, with a reversing motion at each end of a trough, and they alternately push and pull a mass of candy lying in a trough. There is no lapping of candy, strand upon strand. In the Langer machine, a single pulling member moving in a continuous circular path, continuously exerts a pulling force on a mass of candy suspended in the air. In Burr vs. Duryee, 1 Wall. 531, 572, the court said: "That two machines produce the same effect will not justify the assertion that they are substantially the same, or that the devices used by one are therefore mere equivalents for those of the other. * * * An infringement involves substantial identity, whether that identity be described by the terms 'same principle,' same '*modus operandi*' or any other. It is a copy of the thing described in the specification of the patentee, either without variation or with such variations as are consistent with its being in substance the same thing. If the invention of the patentee be a machine, it will be infringed by a machine which incorporates in its structure and operation the substance of the invention; that is, by an arrangement or mechanism which performs the same service or produces the same effect in the same way." And in Westinghouse vs. Boyden Power Brake Co., 170 U. S. 537, 569, the Court said: "But after all, even if the patent for a machine be a pioneer, the alleged infringer must have done something more than reach the same result. He must have reached it by substantially the same or similar means, or the rule that the function of a machine cannot be patented is of no practical value. To say that the patentee of a pioneer invention for a new mechanism is entitled to every mechanical device which produces the same result is to hold, in other language, that he is entitled to patent his function."

The decree is reversed and the cause is remanded with instructions to dismiss the bill.

[Endorsed]: Opinion. Filed February 24, 1920. F. D. Monckton, Clerk. By Paul P. O'Brien, Deputy Clerk.

United States Circuit Court of Appeals for the Ninth Circuit.

No. 3341.

JIM M. MASTORES,

Appellant,

vs.

HERBERT L. HILDRETH,

Appellee.

Decree U. S. Circuit Court of Appeals.

Appeal from the District Court of the United States for the District of Oregon.

This cause came on to be heard on the transcript of the Record from the District Court of the United States for the District of Oregon and was duly submitted.

On consideration whereof, it is now here ordered, adjudged, and decreed by this Court, that the decree of the said District Court in this cause be, and hereby is, reversed, with costs in favor of the appellant and against the appellee, and that this cause be, and is hereby remanded to the said District Court with instructions to dismiss the bill.

It is further ordered, adjudged and decreed by this Court, that the appellant recover against the appellee for his costs herein expended, and have execution therefor.

[Endorsed]: Decree. Filed and entered February 24, 1920. F. D. Monckton, Clerk. By Paul P. O'Brien, Deputy Clerk.

At a stated term, to wit, the October Term, A. D. 1919, of the United States Circuit Court of Appeals for the Ninth Circuit, held in the courtroom thereof, in the City and County of San Francisco, in the State of California, on Monday, the fifth day of April, in the year of our Lord one thousand nine hundred and twenty. Present: The Honorable WILLIAM W. MORROW, Circuit Judge, Presiding; The Honorable WILLIAM H. HUNT, Circuit Judge.

No. 3341.

JIM M. MASTORAS,

Appellant,

vs.

HERBERT L. HILDRETH,

Appellee.

Order Denying Petition for Rehearing.

On consideration thereof, and by direction of the Honorable William B. Gilbert, William W. Morrow, and William H. Hunt, Circuit Judges, before whom the cause was heard, it is ORDERED that the petition, filed March 23, 1920, on behalf of the appellee for a rehearing of the above-entitled cause be, and hereby is denied.

United States Circuit Court of Appeals for the Ninth Circuit.

No. 3341.

JIM M. MASTORAS,

Appellant,

vs.

HERBERT L. HILDRETH,

Appellee.

Order Staying Issuance of Mandate Under Rule 32 Until After Supreme Court U. S. Passes upon Petition for Writ of Certiorari, etc.

Upon telegraphic application of Mr. George P. Dike, counsel for the appellee, and good cause therefor appearing, ORDERED mandate of this court under Rule 32 in the above-entitled cause stayed for a period of thirty (30) days from the 9th instant, on condition that the petition for writ of certiorari to be made to the Supreme Court of the United States be filed and docketed in said Supreme Court within the time so extended, and submitted to said Supreme Court agreeably to subdivision 4 of Rule 37 of the Rules of said Supreme Court, and in that event the said mandate be stayed until after the determination of said petition.

Dated San Francisco, California, April 9, 1920.

WM. W. MORROW,
United States Circuit Judge.
WM. H. HUNT,
United States Circuit Judge.

[Endorsed]: Order Staying Issuance of Mandate, etc. Filed April 9, 1920. F. D. Monckton, Clerk.

United States Circuit Court of Appeals for the Ninth Circuit.

No. 3341.

JIM M. MASTORAS,

Appellant,

vs.

HERBERT L. HILDRETH,

Appellee.

Certificate of Clerk U. S. Circuit Court of Appeals to Record Certified Under Section 3 of Rule 37 of the Rules of the Supreme Court of the United States.

I, Frank D. Monckton, as Clerk of the United States Circuit Court of Appeals for the Ninth Circuit, do hereby certify the foregoing three hundred and forty-four (344) pages, numbered from and including 1 to and including 344, to be a full, true and correct copy of the entire record of the above-entitled case in the said Circuit Court of Appeals, including all original exhibits excepting Plaintiff's Exhibits 19 and 20 and Defendant's Exhibit "D," made pursuant to telegraphic request of counsel for the appellee, and certified under section 3 of Rule 37 of the rules of the Supreme Court of the United States, as the originals thereof remain on file and appear of record in my office.

ATTEST my hand and the seal of the said the United States Circuit Court of Appeals for the Ninth Circuit, at the city of San Francisco, in the State of California, this 23d day of April, A. D. 1920.

[Seal]

F. D. MONCKTON,
Clerk.

By Paul P. O'Brien,
Deputy Clerk.

UNITED STATES OF AMERICA, *ss:*

[Seal of the Supreme Court of the United States.]

The President of the United States of America to the Honorable the Judges of the United States Circuit Court of Appeals for the Ninth Circuit, Greeting:

Being informed that there is now pending before you a suit in which Jim M. Mastoras is appellant, and Herbert L. Hildreth is appellee, No. 3341, which suit was removed into the said Circuit Court of Appeals by virtue of an appeal from the District Court of the United States for the District of Oregon, and we, being willing for certain reasons that the said cause and the record and proceedings therein should be certified by the said Circuit Court of Appeals and removed into the Supreme Court of the United States, do hereby command you that you send without delay to the said Supreme Court, as aforesaid, the record and proceedings in said cause, so that the said Supreme Court may act thereon as of right and according to law ought to be done.

Witness the Honorable Edward D. White, Chief Justice of the United States, the fifteenth day of October, in the year of our Lord one thousand nine hundred and twenty.

JAMES D. MAHER,
Clerk of the Supreme Court of the United States.

[Endorsed:] File No. 27,676. Supreme Court of the United States, October Term, 1920. No. 333. Herbert L. Hildreth vs. Jim M. Mastoras. Writ of Certiorari. Docketed. No. 3341. United States Circuit Court of Appeals for the Ninth Circuit. Filed Oct. 25, 1920. F. D. Monckton, Clerk, by Paul P. O'Brien, Deputy Clerk.

United States Circuit Court of Appeals for the Ninth Circuit.

No. 3341.

JIM M. MASTORES, Appellant,

vs.

HERBERT L. HILDRETH, Appellee.

Stipulation.

It is hereby stipulated by and between the parties to the above entitled cause that the transcript of record filed in the Supreme Court of the United States as exhibit to Petition for Writ of Certiorari in the case of Herbert L. Hildreth, Petitioner v. Jim M. Mastoras, Respondent, No. 333 of the October Term 1920 shall stand and be

taken as the transcript of record in the above-entitled cause on the return to the writ of certiorari issued out of the Supreme Court of the United States and bearing date as of the 15th day of October in the year One Thousand Nine Hundred and Twenty.

(Sgd.) W. A. ROBBINS,
One of Attorneys for Jim M. Mastoras,
Appellant and Respondent.

(Sgd.) GEORGE P. DIKE,
(Sgd.) CHESTER G. MURPHY,
Attorneys for Herbert L. Hildreth,
Appellee and Petitioner.

[Endorsed:] Stipulation as to return to Writ of Certiorari. Filed October 28, 1920. F. D. Monckton, Clerk, by Paul P. O'Brien, Deputy Clerk.

United States Circuit Court of Appeals for the Ninth Circuit.

No. 3341.

JIM M. MASTORES, Appellant,

vs.

HERBERT L. HILDRETH, Appellee.

Certificate of Clerk U. S. Circuit Court of Appeals to Stipulation as to Return to Writ of Certiorari from the Supreme Court of the United States.

I, Frank D. Monckton, as Clerk of the United States Circuit Court of Appeals for the Ninth Circuit, do hereby certify the preceding page to be a full, true and correct copy of a "Stipulation as to Return to Writ of Certiorari," filed in the above entitled cause on the 28th day of October, A. D. 1920, as the original thereof remains on file and of record in my office.

Attest my hand and the seal of the United States Circuit Court of Appeals for the Ninth Circuit, at the City of San Francisco, in the State of California, this 28th day of October, A. D. 1920.

[Seal of United States Circuit Court of Appeals, Ninth Circuit.]

F. D. MONCKTON,
Clerk,
By PAUL P. O'BRIEN,
Deputy Clerk.

United States Circuit Court of Appeals for the Ninth Circuit.

No. 3341.

JIM M. MASTORES, Appellant,

vs.

HERBERT L. HILDRETH, Appellee.

Return to Writ of Certiorari.

By direction of the Honorable the Judges of the United States Circuit Court of Appeals for the Ninth Circuit, I, Frank D. Monckton, as Clerk of said Court, in obedience to the annexed writ of certiorari, issued out of the Honorable the Supreme Court of the United States and addressed to the Honorable the Judges of the United States Circuit Court of Appeals for the Ninth Circuit, commanding them to send, without delay, to the said Supreme Court the record and proceedings in the above-entitled cause, do attach to the said writ a certified copy of:

(1) Stipulation as to Return to Writ of Certiorari, the original of which said Stipulation was filed in said cause on this 28th day of October, A. D. 1920; and

(2) Book of Testimony taken in the District Court of the United States for the District of Oregon, filed February 28, 1918;

Deposition of Joseph P. Livermore taken pursuant to sections 863 and 864 of the Revised Statutes of the U. S. on behalf of Plaintiff in the above-entitled case;

Plaintiff's Exhibits: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 (Same as Def't's "B"), 12, 13, 14, 15, 16, 17, 19, 20;

Defendant's Exhibits: Patent Office Drawings and Specification No. 752,979, A, D, E, F, G, H, I, J, K;

U. S. Letters Patent Nos. 831,501 and 1,232,697,

and in accordance with said stipulation, do hereby send the certified copy thereof, together with the original exhibits, to the said Supreme Court as the Return to the said Writ of Certiorari.

In testimony whereof, I have hereunto set my hand and affixed the seal of the United States Circuit Court of Appeals for the Ninth Circuit, at the City of San Francisco, in the State of California, this 28th day of October, A. D. 1920.

[Seal of United States Circuit Court of Appeals, Ninth Circuit.]

F. D. MONCKTON,
Clerk,
By PAUL P. O'BRIEN,
Deputy Clerk.

[Endorsed:] 333/27,676.

[Endorsed:] File No. 27,676. Supreme Court U. S., October Term, 1920. Term No. 333. Herbert L. Hildreth, petitioner, vs. Jim M. Mastoras. Writ of certiorari and return. Filed Nov. 12, 1920.